AMAZING STORIES

AUG.-SEPT.

25 Cents

They gave me the "ha-ha" when I offered to play

... but I was the life of the party after that

THE first day of Dorothy's house party at her cottage on the shore had been a huge success. With an afternoon of swimming, boating and golfing we were all set for the wonderful dinner that followed.

"Well, folks," said Bill enthusiastically, as we were leaving the table, "I don't know how you feel, but I'm all pepped up for a good dance."

"Fine!" cried Dorothy. "Dick Roberts has his banjo and can sure make it hum. Now who can play the piano?"

Instantly the laughter and merriment ceased. All looked at one another foolishly. But no one said a word.

"How about you, Jim, you play, don't you?" asked Dot.

"Yes, I'll play 'Far, Far Away'," laughed Jim.

"Well, then, Mabel, will you help us out?"

"Honestly, Dot, I hate to admit it, but I can't play a note," she answered.

It certainly looked as if the party were going flat. Plenty of dancers but no one to play.

Then I Offered to Play

"If you folks can stand it," I offered shyly, "I'll play for you."

The crowd, silent until now, instantly burst out in laughter.

"You may be able to play football, Jack, but you can't tackle a piano."

"Quit your kidding," cut in another. "I've never heard you play a note and I've known you all your life."

"There isn't a bar of music in your whole makeup," laughed Mabel.

A feeling of embarrassment mingled with resentment came over me. But as I strode to the piano I couldn't help chuckling to myself when I thought of the surprise I had in store for them.

No one knew what to expect. They thought I was about to make a fool of myself. Some laughed. Others watched me wide-eyed.

Then—I struck the first snappy chords of that foot-loosing fox-trot, "St. Louis Blues." Dick was so dumbfounded he almost dropped his banjo. But in a flash he had picked up the rhythm and was strumming away like mad.

Although they could hardly believe their ears, the crowd were all on their feet in a jiffy. And how they danced! Fox-trots, waltzes — with rests few and far between.

After a good round of dancing I decided to give them some real music and began a beautiful Indian love lyric.

The couples, who but a moment before had been dancing merrily, were now seated quietly about the room, entranced by that plaintive melody.

No sooner had the last soft notes died away than I was surrounded by my astonished friends. Questions were fired at me from all sides.

"How wonderful, Jack! Why haven't you played for us before?"

"How long have you been studying?"

"Why have you kept it a secret all these years when you might have been playing for us?"

"Who gave you lessons? He must be wonderful!"

I Reveal My Secret

Then I explained how some time before I made up my mind to go in for something besides sports. I wanted to be able to play—to entertain others—to be popular. But when I thought of the great expense and the years of study and practice required, I hesitated.

Then one day I ran across an announcement in a magazine telling of a new quick and simple way to learn music at home, without a teacher.

I was a little skeptical at first, but it was just what I wanted so I sent for the free booklet and demonstration lesson. The moment I saw it I was convinced and sent for the complete course at once.

When the lessons arrived, I started right in giving a few minutes of my spare time each day. And what fun it was — even from the very beginning. No monotonous scales—no tedious exercises—no tricky methods — just a simple common-sense system that even a child could understand. And best of all, I was playing my favorite numbers almost from the start.

Anyone can learn to play this easy no-teacher way—right at home. The piano if desired; or any other instrument that you may choose. Over 600,000 people have learned to play by this simple system in less than half the time it takes by the old-fashioned methods. And regardless of what instrument you pick, the cost averages only a few cents a day.

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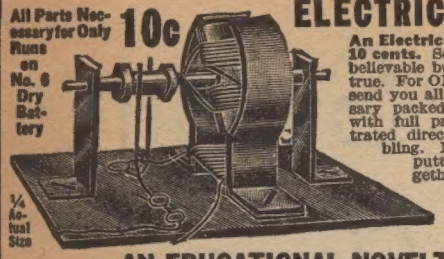

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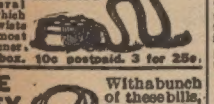

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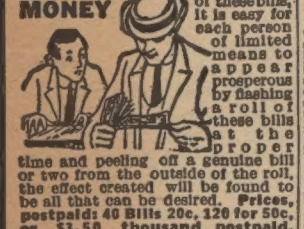

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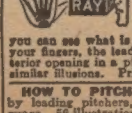

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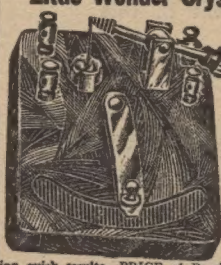

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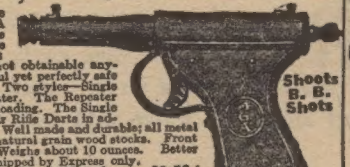

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AMAZING STORIES

Science Fiction

Vol. 8 August-September, 1933 No. 5

In Our October Issue

THE MEN WITHOUT SHADOWS, by Stanton A. Coblentz. Mr. Coblentz introduces us to a strange race of shadowless beings and gives us, as he always does, a delightful bit of sarcasm based on the queer weaknesses of humanity. To-day it reads well, for the useless troubles created by mankind are very evident in this epoch.

WHISPER OF DEATH, by Harl Vincent. Again one of our favorite authors takes us out into the stratosphere and depicts a wonderful plot of criminals.

INTO THE HYDROSPHERE, by Neil R. Jones. The author is well-known to a wide circle of readers. This story involves a strange conception of a great sphere of water with fighting galore.

And Other Unusual Science Fiction

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OUR COVER

depicts a scene from the story entitled "The Meteor-Men of Plaa," by Henry Kostkos, in which the heroes of the story are shown stepping on the uncertain footing with their strange looking space suits and oxygen cylinders.

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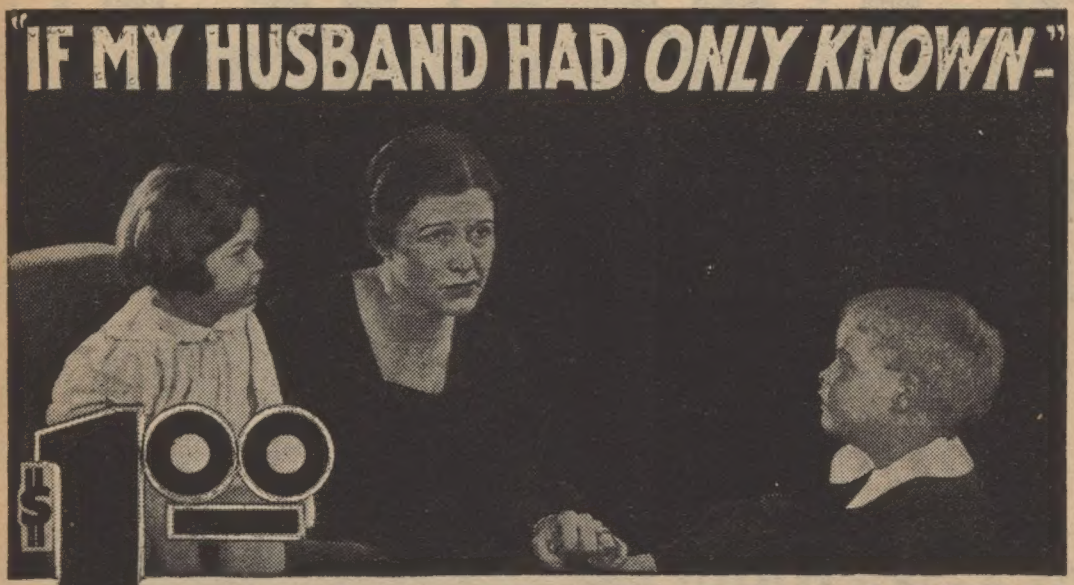
"IF MY HUSBAND HAD *ONLY KNOWN*—"



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26	1057	43	607
27	1030	44	583
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T. O'CONOR SLOANE, Ph.D., *Editor*

Editorial and General Offices: 222 West 39th Street, New York, N. Y.

Extravagant Fiction Today - - - - - - - - - *Cold Fact Tomorrow*

Old Time Railroading

By T. O'Conor Sloane, Ph.D.

SOME years ago in the vicinity of the city of Kingston in this state there were the remains of an old tramway, which was a representative of the primitive ancestor of the modern railroad. There was a rough looking road along whose sides two rows of heavy flagstones were laid, at a distance apart adapted to receive the wheels of cart or wagon, drawn by horse power. The driver, had as his task to keep his team in the pathway between the rows of flagstones, and the wheels ran with some reduction of traction on the comparatively smooth stones.

Now if we substitute for the flagstones perfectly smooth steel rails, thirty-three feet in length and weighing in the neighborhood of one hundred pounds to the yard, resting on transverse sleepers of wood or of steel, we shall have the successor of the stone-laid tramway. It is in this country that we have the clearest distinction drawn between the old and the new, for in England to this day the words tram and tramway are used to designate street cars and railways.

It is interesting to read in books of travel of a century ago or near it, of the old time railroad travel.

Tyrone Power was a favorite actor of the last century. He specialized in Irish characterization, being Irish by birth, which of course must have made it come, literally speaking, quite natural to him to act in such rôles. He was in America in the years, 1833, 1834 and 1835, a century ago. The particular railroad which he tells about was the Camden and Amboy. It was supposed to go from South Amboy, at the mouth of the Raritan river, to the town of Camden, across the Delaware River from the city of Philadelphia. But it was some time before it was extended to Camden. On this road our actor-author tells of his experiences in going from New York to the city of William Penn.

On the first trip which he describes for us, it was just one hundred years ago, he went by steamer through what he calls the Raritan or Amboy Creek, now Staten Island Sound and the Kill van Kull. He failed to admire it, and says it reminded him of the left bank of the Thames. At Amboy, he says, they were at once transferred to the cars "of the new railroad, connecting the Raritan and the Delaware." Their objective was Bordentown, where they were to take a steamboat for Philadelphia. The locomotives, as the writer puts it, were not in condition to do duty, so they went off with horses at about eight miles an hour. The travelers reached Philadelphia by night, the elapsed time is not told us.

HIS next trip to the Quaker City, as he calls it, was more adventurous. As before, he went by steamer to South Amboy, he omits the word 'South" from its name, and this time the engines were in service. The travelers were delighted, he says, at this. Off they went, guessing at the speed, some thinking it as much as twenty miles an hour, when an alarm was given from the rear and there were loud cries of "stop the

engine" coming from the windows of every car on the train. An axle had broken and the last car in the train had turned over, killing two passengers and injuring others. There was a delay of three hours. They reached their destination late in the afternoon.

On one occasion the latter part of the trip was done in stage coaches and Power's description of the driver leaving the impassable highway and crashing through the heavy undergrowth on the side of the road is vivid. He had nothing but admiration for the driver's work.

As late as 1854, a very well-known scientist of that day, Dionysius Lardner, D. C. L., wrote a cyclopaedic book called "Science and Art," and in it he devotes quite a space to railroad accidents. The railroads in England showed better speed at that time than our American practise, doing as much as 30 miles an hour. The American speed was fifteen to twenty miles per hour. He gives the tabulation of the number of accidents. He takes up the question of stopping a train. In those days the braking was all done by hand and the engineer in an extreme case was supposed to reverse his engine, but this reversal, Dr. Lardner claims, might in itself cause a collision between the engine and the cars which it had been pulling. After an accident in 1847, it was found impossible to bring a train of nineteen carriages to rest within a distance of 540 yards, the speed of the train being about 25 miles an hour. It is ludicrous to read that this train was provided with three brakes, one on the tender and two on the carriages. So the Board of Trade, not wishing to be too hard on the railroads, proposed a rule to be observed that a brake should be applied to every fourth carriage. Dr. Lardner thinks that for fast trains each car should have an independent brake and a brakesman. All this is in strange contrast to the braking of trains at the present time, where a train going 25 miles an hour could be stopped in a car's length or less.

IN early American railroad practise, every car was provided with its brakes and these were put on by hand. There was a horizontal hand-wheel at the top of the shaft of the brake gear and this was turned by hand by the brakeman swinging with the full force of his body to the work. It will be seen that the wrists bore against the wheel, and there was a special glove sold as a brakeman's glove which had a clasp at the back of the wrist so as to avoid injury to the member in question.

Then came the bright idea of providing every brake shaft with a drum near its base, which contained a very long helical spring like a magnified clock spring. There was a rachet on the face of the drum and a pawl working into its teeth. The brakeman would go through the train and wind up all these springs by turning the brake-wheel, which was no trifling job. Then when the brakes were put on approaching a station, it could be done the regular way by hand without using the spring, but by means of a rope running through the train near the roof, the engineer or the conductor or other employee by pulling the rope would jerk out all the pawls and the springs would automatically put on the brakes for the entire length of the train giving an emergency stop. This was the curious predecessor of the perfected brakes of the present day operated pneumatically or electrically.

One of the most entertaining things in Dr. Lardner's book, is his collection of plain rules for travelers. Here is a sample rule: You are never to sit in any unusual place or posture. Under this rule you were told that, if there are seats on top of a railway car, you must stay seated, because if you stand up you may be struck by a low bridge. They were not to look out of carriage windows, not to put out their arms, and also "they should take care not to put out their leg." He advises you to remain in your place and not go out at all, until you arrive at your destination or at any rate, to go out as seldom as possible. One of his rules says that express trains are attended with more danger than ordinary trains. Those who desired the greater degree of security should use these trains only when great speed is indispensable. You are to avoid all excursion trains, special trains and all other exceptional trains as being unsafe. If you are in a train which has met with an accident, by which it is stopped, he advises you to leave the car but to remember the preceding rules. If your hat is blown off, or a parcel is dropped you must beware of the impulse to spring from the carriage to recover it. He actually gives five instances of fatal accidents due to such a procedure.

THEY had a way in England of taking private carriages on railway trucks and the owners of the carriage would sit in them in solitary state, so he gives a long account of a carriage occupied by a lady and her maid so placed, which was set on fire by coals from the engine and the occupants had no way of attracting attention. The maid fell out and her skull was fractured and the lady states that she was told that the train was going at the rate of fifty miles an hour. The whole train was in charge of one guard . . . he was at the rear of the entire train, in the baggage car, so that he could see nothing. The lady's description of the accident due to a shower of red hot coals or coke, which eventually caused the carriage to catch fire, was quite impressive. The Doctor's final rule is to travel by day rather than by night and unless urgently pressed, do not travel in foggy weather. Then he gives some examples of people throwing themselves in front of trains and getting killed, which seems to have been quite a habit in those days.

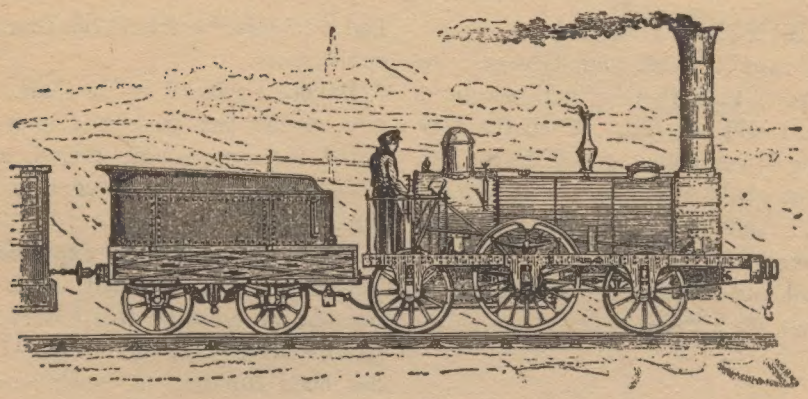
And now in France and Germany motor cars are running on the regular railroads in competition with the locomotive and with electricity. In Germany a running speed in the neighborhood of one hundred miles an hour is the scheduled rate. Soon in the United States we are to have a four car motor driven train which is to make ninety miles an hour. The 'silver of clay', aluminum, is used in the construction to secure lightness. The resistance of the air at these speeds is

so great that smooth contour and stream-line shape is carried out as far as possible.

The rails went through many vicissitudes and changes. One of the primitive kind of rails was made of wood with a flat bar of iron spiked on its top. Sometimes the end of the bar would curl up a little and would get caught by the truck and would force its way through the floor of the car and perhaps kill a passenger. Then as the rails used to wear out, they were rolled with steel faces on an iron base and the welding not being perfect, these faces sometimes came loose. The last notable change has been to increase the length of the rails from thirty to thirty-three feet and they are now laid with staggered joints, the junction of two rails being in line with the center of the opposite rail. There were wide gauges too, in the old days, and the writer remembers very well riding on a wide gauge road in the intermediate period, as it may be expressed, when a third rail had been provided for cars of the regular gauge. On this train there were wide and narrow gauge cars coupled together running on all three rails.

When the thirty foot rails are in use and the joints are not staggered, the noise of the wheels passing over the joints can be distinguished. The ratio of thirty feet to the mile is approximately that of one second to twenty seconds. Thus by counting the "clicks" in twenty seconds an approximation to the speed of the train in miles per hour would be obtained. This was the rule given to the writer by an authority on railroads. For thirty-three foot rails, if the "clicks" could be distinguished, twenty-two and one-half seconds would be the figure to use for the miles per hour.

THE END



from Lardner's Museum of Science & Art, 1854.

An English Locomotive Engine of the Middle of the Last Century.

The Meteor-Men of Plaa

A FUTURE-SCIENCE NOVELETTE

By HENRY KOSTKOS

WE are pleased to present a new author to our readers. He gives us a vivid tale of a strange region far above the atmosphere of the earth, telling us of the inhabitants and of their lives and their warfares, in which latter our heroes take a prominent part. We read of their strange return to earth and of the means they adopted to escape from the regions of the Plaaians.

Illustrated by MOREY

GORDON BANCROFT leaned his gaunt frame forward. "I tell you, George," he said in a voice that trembled with emotion, "this time I will not fail. When the new space flyer is completed it will hurtle me into the neutrosphere as easily as you can carry a football for a touchdown. And who knows what strange creatures I may discover there?"

The scientist clasped and unclasped his long sensitive fingers with an air of nervous preoccupation before he spoke again.

Bancroft's Proposed Investigations of the Upper Regions Above the Earth

"I'VE worked on this theory many years, longer than I—bah!" he snapped his fingers, "long enough. Now I will prove it, not only to satisfy myself, but also to convince those long-bearded fools at the Institute."

Scott had known Bancroft the scientist, Bancroft whom they called the mad genius of the Kittatinny Mountains, too long, to doubt the earnestness and conviction of the man. A stranger might have thought him a vehement egotist, but then Bancroft was not in the habit of confiding in strangers and cared nothing for the small talk that is demanded by the average run of friends. All the more astonishing then, that he should have formed a social alliance with George Scott, whose nature and physique were as different from his own as chalk is from cheese. But regardless of the cause, the visionary scientist and the musclar athlete had established a friendship that nothing under the sun could sever.

Bancroft relaxed in his chair. The strained expression on his face gave way to a composure that reassured his sympathetic friend, and his eyes gleamed with a new light, as he continued his startling revelation.

"While scientists and experimenters the world over have been shooting their space rockets into the air, not one of these devices has ever reached beyond the stratosphere. Our knowledge of the upper air regions has been confined to controversial guesses. But my magnetic sounding ship has penetrated what I call the neutrosphere, a thousand miles above the surface of the earth!" and as the scientist paused to let the substance of his remark sink into his friend's mind, George leaned forward on the edge of his chair.

"Good Lord, man, do you mean to say that you have actually taken soundings at that altitude?" he asked incredulously.

"Not only made soundings but I have brought back living organisms," Bancroft continued. "Come inside a minute and I'll show you."

Beings of the Upper Regions

HE led his friend toward a small glass case that stood on the laboratory table, with tubes running to a group of steel tanks and air compressors.

"Look in there on that shelf. See them?" Bancroft pointed to three queer putty-colored insects about

The room was entirely devoid of furnishings, more like a drill hall in an armory, and the earthmen wondered what would transpire in this vacant chamber. However, their host did not leave them in suspense very long

the size of grasshoppers, the like of which he had never seen before. George examined one of the creatures as closely as the glass case would permit. They were moving about sluggishly as if the weight of air were too great for their bodies.

"What purpose do those sacks of membrane on their backs serve?" Scott asked.

"I was just about to tell you. I dissected several of the insects and discovered that the sacks contain a gas probably our helium. I concluded that the environment in which the creatures of the neutrosphere live requires that their bodies be supported at least partially by a buoyant gas which they generate. Watch this," he commanded as he turned the valves on the tanks and studied the dial on the indicator. "I'm going to simulate the atmospheric conditions of the neutrosphere."

As the various gasses rushed into the hermetically sealed case, the insects began to assume greater animation. They lifted themselves slowly from the floor of the cage and began to beat their short wings against the gas mixture until they were in full flight, describing graceful circles within the air-tight enclosure.

"I have found that they live longer when they are kept dormant, so I don't permit them to breathe the more energyzing air of their normal environment," Bancroft explained. Then as the two men returned to the porch, the scientist outlined his theory of life in the upper air regions.

He explained that countless millions of years ago when the world was very young, microscopical bits of living organism, seeds of life, were scattered throughout the solar system from some remote world by a gigantic force or hand. These tiny sub-amoebas were enmeshed by the earth and other planets where they underwent a process of evolution and took the form most suitable for life in the environment into which they were hurled. In the upper fringes of the earth's atmosphere, his magnetic vehicle had at times encountered a barrier beyond which it was powerless to proceed. It was here that the insects had been trapped by the device.

The Satellites of the Earth

"WE know," Bancroft's eyes lit up again, "that the moon is not our only satellite. There are millions of solid or semi-solid particles, some the size of grains of sand, others hundreds of miles in diameter, revolving around the earth. This enabled me to test my theory. I sent up my sounding ship a countless number of times. Time after time I was doomed to disappointment—until one day I found what I was looking for. Yes, I located a space one thousand miles above us that contains life—not only the kind that you saw a few minutes ago—but probably human beings like ourselves, perhaps with a civilization and intelligence far superior to our own!"

George Scott had been able, up to this time, to control his emotions, but he could not avoid an involuntary gasp at this startling disclosure.

"Do you mean that you plan to go up—a thousand miles—to explore what you call the neutrosphere? And your new space ship—can it make such a flight?"

"Yes. She is out in the hangar there now. I hope to have her completed and ready for the trip in a month."

A week later George Scott was up in Canada, preparing to start on a fishing trip when he received a radiogram from Gordon Bancroft.

> Most unexpected event occurred which substantiates my theory of life in upper air regions as explained to you recently. Speeding construction of space ship. Will leave in five days. Can you come down to see me before I go?
>
> GORDON BANCROFT.

George was puzzled by the message, but his curiosity was aroused and he sent a reply informing Bancroft that he would postpone his fishing and fly down to the laboratory at once.

"I wonder what the devil Gordon has in mind now," he mused as he took off in his helicopter. It was evening when he dropped down at Bancroft's secluded estate. All the lights in the laboratory building were lit and inside of the hangar he could see workmen bustling with activity under powerful incandescent lamps. The blue glow from the welding torches cast a weird color-tone over the whole scene, the whirling of the lathes and the crash of the grinders rent the silence of the mountains and gave the place the aspect of a busy industrial community.

George took all this in at a glance as he pushed into the laboratory to find Bancroft seated at a desk which was littered with blueprints, the shop foreman leaning over them and pointing to a detail with a stubby pencil.

In Bancroft's Mountain Workshop

"WELL, well, George, I didn't expect you down so soon, but I'm mighty glad to have you here. Pull up a chair. Be with you in a minute."

"I guess I don't have to ask you what's going on here," George Scott smiled after Bancroft's foreman had left and the two men sat back and looked at one another. "There's ample proof that you mean business with a capital B. But I'm anxious to find out why you so suddenly decided to speed up the completion of your ship."

"It is almost unbelievable, George. A few days after you left I received an urgent message from Dr. Robert Browning, Curator in Chief of Anthropology in the National Museum at Washington, D. C., asking me to come down at once on a matter that would be of vital interest to me. You remember that I men-

tioned collaborating with Dr. Browning in his work on the Evolution of Mammalian Life," and as Scott nodded his head, he continued, "He was the only one outside of you who knew about my space soundings.

"You might recall that the newspapers mentioned, about a week ago, the unusual shower of meteors that was visible in the South Atlantic states. Fortunately the National Museum had an expedition doing some work in the marshes of Florida. I say fortunately, for otherwise the discovery might never have been made.

"According to Dr. Browning, the members of the expedition, in charge of a brilliant young anthropologist, a protégé of the Doctor, were preparing to retire to their little cabin, when they were attracted by flashes of light that lit up the night sky brilliantly. Literally thousands of incandescent particles were falling nearby, and one of the meteors appeared to be coming directly towards them until it fell to the ground in a sheet of flame. To all appearances it hit the earth not more than a hundred yards away, but when they rushed out they could find no trace of meteorite fragments nor any sign of a crater, although they searched the ground carefully with their flashlights. They gave up and decided to make a more thorough search by daylight in the morning.

A Meteorman's Remains

"THEY arose early and circled the vicinity and just as they were about to abandon the attempt one of the men called out from the edge of a stagnant pool. There they found him, George, the badly burned remains of a creature—a meteor-man!" Scott jerked forward in his chair and Bancroft's eyes flashed with a strange, fanatic light. The scientist's words came excitedly, his long fingers clasped and unclasped rhythmically. "The flesh was burned almost entirely off in most places. Even some of the bones were charred, and the head must have been consumed by the flames for it was nowhere to be found. Fortunately he had fallen into the water at the edge of the pool, which cooled the red-hot mass and prevented it from being burned to ashes. They rushed the remains to Washington at once and Dr. Browning got in touch with me right away.

"George, it bore out my theory exactly! On his back I found traces of a sack-like membrane that contained the buoyant gas that the insects I showed you also possess. What puzzled me mostly was the enormous size of his feet; the bones measured fully thirty inches in length and supported a webbed membrane, similar to that of a duck. The ground of their world is apparently composed of some oozy substance that requires feet specially adapted to tread it without sinking into it. You accomplish the same thing when you wear snow shoes on your winter hikes in Canada.

"Unfortunately, before we could complete our investigations the body decomposed. Ugh, it was horrible, the stench. Even the bones disintegrated. I should have known better but I guess that I was too excited, and didn't think of placing the body in the special gasses in which I kept the insects."

George Scott interrupted, "But Gordon, the discovery would have startled the world. Didn't any word of it leak out to the newspapers?"

Bancroft looked at his friend with a hurt expression on his face, "My dear boy, you have known me long enough to understand that scientists don't make statements that they can not substantiate. Where was our proof? Gone—gone. But the world shall have it. Yes, in less than a week, perhaps, when my space ship is launched and I ascend to the upper world."

Hunting for Meteormen

THE long day had wearied George, but his friend's strange story had excited him and kept him very wide awake indeed. Hunting for Meteor-Men, he thought, had it all over big game hunting in Africa. That restless urge, that motivated George Scott ever since he had been big enough to toddle away from his father at the circus and hide behind the lion's cage in the side show, in the hope that he would be taken along, had compelled him to travel to far lands and to experience thrilling adventures. He had turned up in queer corners of the world, wherever there was some excitement. Jobs? He had tried them all, from stevedoring to soldiering, from camp directing to playing professional football, but his boyish enthusiasm for new things had not abated one iota. He was still seeking the supreme adventure. Well, here was his opportunity! He turned to Bancroft.

"Bancroft, whom are you taking along with you?"

"I am going alone. There is an element of uncertainty, and I do not want to expose any one else to danger," the scientist replied in a measured tone without glancing up from the plans in which he had suddenly again become keenly interested.

"You may have thought that you were going alone, but now you have a passenger. I wouldn't miss this chance for all the world." George rose in his enthusiasm and walked over to the other man.

Bancroft looked up with a smile and his eyes twinkled, "You don't have to tell me. I had counted on you from the first," and then his expression became more serious as he stretched out his hand which the other grasped warmly, "But it is true about the danger, George, we will face it together, you and I."

THE next few days were full of feverish activity for everyone in Bancroft's mountain laboratory, and George Scott tugged in and lent a hand, carrying metal parts into the ship, driving recklessly into the city to pick up some special instruments, and doing a thousand and one of the odd jobs that were waiting to

be done around the place before their departure.

The newspapers had gotten wind of the unusual space ship that was unlike any yet constructed, and their reporters swarmed outside of the high iron gates with the hope of being admitted to the hangar. But Bancroft wanted none of their publicity and posted guards to keep out all but those authorized to enter. In spite of the secrecy that surrounded the details of the project, reams of copy were written and the Sunday supplements featured lurid articles illustrated with bizarre pictures. But even the most daring reporter or the most imaginative artist could not picture the unique design of the flyer more clearly than a blind man could describe a scene enacted upon a television stage.

The Space Ship Described—Its Strange Design

WHEN George first saw the strange metallic object that was soon to be his home he was inclined to doubt the sanity of his friend. It bore no resemblance to the wingless helicopters that dotted the air lanes, nor did it follow the conventional bullet-like design that the ultimate rocket ship was supposed to be destined to have. Instead, it looked exactly like a thick isosceles triangle, thirty feet wide with sides fifty feet long. The ship was twelve feet high and constructed of a special light-weight alloy of aluminum, steel and bronze, insulated against heat and cold by layers of asbestos. The space flyer was designed to rise and descend in a flat or plane position; the triangular shape was adopted to maintain the equilibrium of the ship.

The propelling force was the development that required ten years of painstaking experimental work on the part of Bancroft to perfect and the small models, that he had sent aloft to the neutrosphere, attested the feasibility of the new power. The ship was motivated by polarity rays, that is, magnetic lines of force which acted independent of the force of gravity upon the huge magnet, the earth, to either attract or repel the space ship. Powerful generators driven by a new type of hydrogen gas turbine supplied the power.

"We must leave to-morrow," Bancroft explained while he tested the instruments in the control room, "or wait a full month. My calculations indicate that the satellite on which the meteor-men live revolves around the earth once every thirty days. We will start three minutes before ten o'clock to-morrow morning."

George slept but little that night. His mind was active and when he finally dozed off into fitful periods of stupor he dreamt of giant hunchbacks with great sacks of skin growing between their shoulder blades, closing in on him. Now one would rush forward, only to be felled by a blow from his fists, then another would take his place until George's arms were weary from slugging. He awoke long before daybreak and after dressing hurriedly he slipped out to the hangar, only to find Bancroft already on the job inspecting every inch of his strange space flyer.

At nine-thirty the workmen wheeled the ship out of the hangar on the special cradle, and the two passengers, clutching their last pieces of personal belongings, clambered aboard. Bancroft was cool and collected, displaying no emotion whatsoever, unless you noticed the bright gleam in his eyes that always mirrored suppressed excitement. He shook hands with Dr. Browning and several other scientists who had come to watch the start of a quest that any of them would have given an arm to be allowed to join. To a scientist any danger encountered in the course of his investigations is taken as a part of the daily routine, to be met and surmounted, so that mankind may progress through the acquisition of knowledge of the unknown.

Hidden Excitement of Bancroft and His Passenger, George Scott

GEORGE tried to assume the nonchalance of his friend, but without much success. Not that he felt any physical fear of what they might chance to encounter in the uncharted upper regions, but the thought of leaving behind all that this earth meant, caused his imagination to work overtime. True, he would not give up the journey for anything in the world, but then a fellow had so much time for reflection while the chronometer ticked off seconds that were ages long. Bancroft sat placidly in the control chair watching, ever watching the movement of the minute hand.

"Nine forty-five—nine fifty—nine fifty-five—" he droned in measured tones. "Not nervous, George? We'll be off in less than two minutes now."

The Start for the Neutrosphere

GEORGE SCOTT walked over to the observation window. The workmen and the spectators had withdrawn about fifty yards from the ship in accordance with Bancroft's request for none knew how violent the reaction from the polarity rays might be. The loudspeaker in the control compartment hummed, then the voice of Bancroft's radio operator, who was commanded to keep in constant touch with the ship, spoke. "Fifteen seconds to go, by the Naval Observatory chronometer, sir,"

George Bancroft was tense now. His hands gripped a lever and he pressed several buttons that started the powerful generators. The red and green pilot lights glowed weirdly on the dark face of the switchboard. In a few seconds this scientist was to determine the results of his life-long labors. Would the ship rise? And if so would he be able to navigate it to its destination and then return safely to earth? This was the crucial test upon which he had staked his all.

The stroke of a gong broke the tense silence of the control room. George looked at the chronometer. It indicated nine fifty-seven. It was time now—he clutched frantically for the end of the switchboard, as

the floor jerked upward, throwing his knees into violent contact with his chin. Vivid points of light flashed before his eyes and the room reeled around him. He came to himself quite suddenly when he heard the anxious voice of Bancroft, "You're not hurt, are you?"

Scott rose to his feet and shook his head. "No, but that hop-off took me off my guard, much as I was expecting it. To tell the truth I had no idea what it would be like. But man alive, you've done it! Look at us soar up through those clouds."

He peered out of the observation window at his side but could see nothing of the familiar landmarks. Clouds drifted by to obscure their vision. Brancroft pressed a button and a panel in the floor slid back silently, revealing a glass window, through which the two explorers could view the fast receding earth. The laboratory buildings and the hangar were nothing but tiny specks directly below them; the mountain ranges were more prominent with their wooded slopes, while the thin thread of the Delaware River tangled itself into obscurity in the distance. For the first few minutes the landscape below appeared not unlike the panorama that George could get from his helicopter, but the ship soon reached the stratosphere from which even the mountain ranges and the rivers lost their identity and the world below revealed nothing but a dark patch that was the land and a lighter surface which was the sea.

The force of the polarity rays was propelling the ship swiftly on its course, the instruments on the control board indicating the speed, the altitude, and their position with such accuracy that Gordon soon felt free to leave his chair and walk about the triangular ship testing the walls for any signs of stress. Up to this the men had been too much engrossed in the immediate problems of getting the ship under way to be in the mood for conversation. But now that the strain had eased they relaxed.

In a World of Their Own—In the Meteor Region

"YOU know it feels splendid to be up here in a world of our own, flying through space with nothing earthly to fret about." Bancroft was exhilarated by his newly found freedom and he pranced about like a boy. "Fine place to perform research work, no interruptions and absolutely quiet."

"I don't doubt that you feel perfectly at home out in space," George's voice had a trace of misgiving, "but I would rather plant my two feet upon the good old earth once in a while. What under the sun is that?" he asked in a startled voice as the outer walls of the ship resounded from the ricochet of a shower of stones.

"Quite harmless," Gordon assured him. "We have entered the meteor region where we can expect a constant bombardment of small particles, some of which are no larger than grains of sand.

"The heavier masses are few and far between."

In spite of Gordon's statement regarding the relative scarcity of meteors that were large enough to do any damage there was a real danger from these flying missiles that traveled at a tremendous speed. Not more than a quarter of an hour after they had entered the meteor region there was a terrifying impact of a large mass on the top of the ship. Bancroft and Scott were sitting in the tiny kitchenette eating lunch, when the shock threw their plates up into their faces, spattering spaghetti in their hair, ears, and down their necks. If it was not such a serious thing the men would have roared with laughter at the ludicrous appearance they presented. The impact of the meteor had pushed the ceiling down directly above their heads as the heavy metal girders and plates buckled inward with a tearing and crushing sound. The ship tottered perilously, swaying its triangular shape from side to side until it seemed to the half-stunned men that it would turn over and fall with a sickening spin back upon the earth it had left only a short time ago.

George Scott was the first to recover. He sprang to his feet and bounded over to his companion who was still sprawled on the floor, his eyes staring with a glazed expression at the damaged ceiling overhead. He tried to lift the stricken man to his feet, but in spite of Scott's great strength the lurching of the ship was so violent that it was impossible for him to maintain a foothold. Bancroft was apparently paralyzed for he had lost control of his limbs, but his lips moved and, as he gasped for breath, he tried hard to speak. George bent lower and he could hear a faint, husky whisper issue from his throat, "Controls—stop—ship—hurry—"

After the Collision with the Meteorite

GEORGE had watched the scientist navigate the craft and had learned much about the peculiarities of this strange vessel during the last days of its construction, but he had his doubts about being able to select the proper switches and levers to stop the erratic action of the space ship. But this was no time to lose one's head, he thought; many years of incessant work and arduous research that Bancroft had performed would be wasted if he should fail; yes, even the life of a staunch friend would be sacrificed. With these thoughts beating through his brain, George strode into the control room and carefully studied the levers and switches. He glanced at the dials, they were oscillating erratically. Not much help here, he thought, even if he knew how to read them.

It seemed that the polarity rays were leaving the ship spasmodically, and this caused the lurching. When the level indicator, the only instrument he was familiar with, showed that the ship was swinging towards an even keel, he pulled out the east and west ray-switches, disconnecting the motive power entirely. The great triangle, released from its sustaining force, dropped earthward like a plummet at tremendously increasing speed.

But the lurching was becoming less violent until eventually the floor of the ship remained level. George had gambled upon the unobstructed pull of gravity to right the vessel and his hunch had been right!

But a new problem arose to worry him. Could he stop this hurtling mass in time to prevent the metal of the hull from melting under the tremendous heat generated by the friction of air even in this rarefied atmosphere, or in time to avert that sickening crash upon the earth. He must apply the polarity rays gradually, he reasoned, put on the brakes slowly and evenly. He pulled back the two levers labeled "Polarity Increase-Decrease," and threw the switches to connect the power. Then he operated the levers slowly in the direction indicated by the "increase" arrow.

At first nothing happened and George experienced a sinking sensation in his heart that even the bravest of men feel when they know that hope is gone, but as he applied the force of the rays more fully the speed of the ship slackened perceptibly. Finally the fall ceased entirely and the space flyer became suspended motionless in the upper air regions, while the pull of earth gravity was neutralized by the magnetic reaction of the rays.

Bancroft, After the Collision

GEORGE was too preoccupied with his task of getting the ship under control to have time to think about the condition of his friend. But now that the vessel was at last under control he turned his attention to the stricken scientist. He was both surprised and grateful to find him sitting up in a chair.

"Are you all right now, Old Timer?" he asked.

"Yes, much better." He had regained the use of his muscles and speech but was still a bit unsteady on his feet. "That was fine work, George, without your quick thinking we would by now be back on earth, and this would have been our coffin." He shuddered a little at the thought. "The ship seems to be in a safe condition but the fall has upset my calculations so much that we must trust to luck to reach our objective. Of course we can return even now and try it again a month later, that is if you don't want to continue."

He looked at Scott and his eyes mirrored the disappointment that he was sure to feel if the flight was abandoned.

"If it's up to me, I'll say let's continue—even if we reach the moon."

Gordon nodded his approval of the decision and switched on the radio.

"Station 2 GBX, station 2 GBX, George Bancroft calling from Space Ship Number One."

The loudspeaker came to life. "This is station 2 GBX, my God, Mr. Bancroft, we thought that something terrible had happened when we lost contact with you. Come back. Dr. Browning was checking the———", then the voice died away, to be replaced by the steady hum of the loudspeaker. Bancroft switched to the transmitter and shouted into the microphone, then back to the receiver. He turned the dials, observed the meters, but not a sound could he get from the instrument. He was plainly puzzled. Then a look of comprehension came over his features as he switched off the instrument with a resigned air.

"It's no use. We probably penetrated the Heaviside layer, which is radio-proof. From now on we will be out of touch with the earth," and turning to George with a thoughtful frown, he continued, "I wonder what in the world he meant by warning us to return and what did Dr. Browning check———?" His voice trailed off as he muttered incoherently to himself.

As they left the earth farther behind a twilight began to envelop them as the sun's rays found less and less to illuminate in the rarefied atmosphere. Looking down, the earth was luminous with the pale, yellow color of reflected sunlight, revealing a more brilliant red and orange tint around the horizons caused by the earth's vapors, giving the effect of a glorious sunset. The two men were admiring, with mixed emotions, this effulgence of color when the half-light through which they were travelling was suddenly and startlingly replaced by rolling red clouds that enveloped the entire ship and blotted out the earth below. They looked upward hurriedly at the stars which had begun to display themselves faintly. The same red clouds had obscured their vision in this direction also.

The Strange Phenomenon

IN this region, devoid as it was of atmosphere, it seemed incredible that a sufficient amount of vapor could have condensed to form a screen as impenetrable as this one. Bancroft switched on the searchlight at the bottom of the ship and peered out through the observation window. The beam did not penetrate more than fifty feet; it was absorbed by the fiery red billows of gas. The men looked at the level indicator. They were still rising, although the speed of ascent was diminishing gradually, as if the ship was made sluggish by the drag of the heavy vaporous clouds.

As the billows rolled back above the ship, the substance closed in again below. Finally they eased down to a gentle stop, the space flyer resting on a pillow of cloud-like substance. The "ground" in which the ship was half buried had the resiliency of sponge rubber for it quivered for a moment and then sprang back to its former shape. Bancroft's eyes were shining excitedly with a light of triumph as he fairly shouted, "We made it, we made it! We are there. Let me get out and feel this new world and see the creatures that live here."

Something of the scientist's spontaneous enthusiasm took hold of George and he threw off all restraint as he rushed from one observation window to another, shouting gleefully and slapping Bancroft on the back. After the first flash of excitement had subsided, Gordon and George began to consider their surroundings from a more scientific viewpoint. The sun, which was again visible overhead, cast its direct rays down upon the

new-world landscape, touching the red tinted ground and dazzling the two outlanders with its sparks of iridescent reflection. But what gave Bancroft the most concern was the temperature, which heretofore had been as low as sixty degrees below zero, now recorded on the thermometer as 140 degrees Fahrenheit above. Truly intolerable for human beings. The walls of the ship felt hot to the touch, and only the asbestos insulation made the interior habitable.

Gordon was operating the gas analyzer, while George peered over his shoulder at the instruments. "There is some oxygen present, not much though. But I have provided those oxygen concentrators for this very purpose—the masks hanging on the wall. We will wear them. You will recall that I told you that my insects and the chest of the meteor man showed enormous lung capacity which convinced me that the creatures of this world breathed a rarefied atmosphere. Well, that is what led me to devise those masks."

Gordon delivered this information as if he were lecturing to a group of students. Then he looked at his companion and his face softened. To George, who had seldom seen the man display emotion, this mood was a revelation. No longer the cold, calculating man of science, Bancroft's strong features relaxed completely as he contemplated his friend, with the same tenderness that a father might show in the presence of his son. For the moment the man looked old, very old indeed. Something was worrying him, a something that he had no control over, and for which he had prepared himself—but his young friend—that was another matter.

He pulled himself together again, and when he spoke his voice was almost calm. His eyes, however, searched those of the other man constantly, appealingly.

The Magnetic Shield

"I SHOULD have guessed it when my sounding ships could not get beyond it. That substance out there, George, is a perfect magnetic shield. No one ever dreamed that such a thing was possible, but there it is. The polarity rays can not penetrate it—"

"That means we are stalled up here, can't get back to the earth?" There was no anxiety in George's voice, as he indicated that he understood their plight fully. Now that he had definitely arrived somewhere he could set foot upon something that was real, even though only a semi-solid red cloud, and the promise of adventure in this unknown world was a lure that made his eyes gleam with anticipation. He was ready for anything, let to-morrow take care of the problem of returning—meanwhile there was to-day.

Something of the other man's thoughts must have penetrated the mind of Bancroft for his face lit up with relief. He had wondered how his friend would take the news, and although he knew that George's courage was equal to any demand, he was beginning to blame himself for bringing him into danger.

"It might not be as hopeless as it seems. This ground appears to be soft and I see no reason why we can't cut or blast our way through. But we have work ahead of us now, out there, so we must leave the ship." The scientist removed two large canvas sacks from a closet and handed one to George. "Open this. You'll find a space suit in it. Here let me help you with it."

George pulled out a rubberized garment similar to cover-alls, but equipped with a pair of boots having immense web-footed shoes for soles. These were for walking on the soft ground. The mask of the oxygen concentrator covered his head and face completely and he almost choked before Bancroft hurriedly opened the valve. As a final touch to his sartorial ensemble a tank of helium gas was strapped across his shoulders like a knapsack to provide sufficient buoyancy for his body.

"Which way now, captain?" George's muffled voice was jaunty. Bancroft, who had been making observations through the telescope, pointed out the window. "Over in that direction seems to be our best bet. See those rounded prominences; they appear to be man-made structures." In the distance George could just make out through the telescope the faint outlines of what might be a city in this new world.

Leaving the Space Ship on an Exploring Trip—What They Saw

BANCROFT pushed a button and the inner air lock door opened, revealing a small chamber, which they entered. Then this door was closed and the outer door swung open. They were ready for their first steps in this foreign land. George tested the cloud-like substance gingerly with one foot. He sank into it as if it were sponge rubber, but the webbed shoes he wore prevented him from going deeper. The first few steps of the earthmen were extremely clumsy, like the insecure hesitant movements of a man who had just risen from bed after a long confinement. But as they accustomed themselves to the spongy ground and adjusted their helium bags to compensate for the pull of earth gravity they were able to proceed at a fairly respectable gait.

In front of them rolled a landscape of brilliant red tinged cloud-land, unmarked by any vegetation or prominences except for little hillocks that stretched into the distance with measured regularity. "Just like pictures of heaven, we can expect to reach the Golden Gate at any moment or see angels fly by overhead," George remarked lightly.

The temperature, while warm was more bearable than they had first thought possible, due probably to the cooling effect of the atmosphere. As they headed toward the hazy outline of what they assumed to be human habitations the distant city seemed to recede provokingly until George was sure that it was nothing more than a mirage, by which he had often been tantalized on the hot stretches of the Sahara Desert. Indeed, when after what seemed many hours of toilsome plodding, their objective was just as far away as

ever, Bancroft was not so sure but what his friend was right.

"We will never get anywhere by stopping now," he said doggedly. "We must remember, too, that we are not setting a pace for a race horse, with these clumsy things on our feet."

A Rescue in Good Time

LOST in thought, the scientist had been trudging along in front, paying no attention to the ground under his feet. This abstraction proved to be almost of tragic consequences for suddenly his feet shot out from under him and he was sliding down into what he perceived to his horror to be a bottomless pit. Bottomless except for the shining face of the earth a thousand miles below! His frenzied glance was drawn irresistibly to his home planet while he was frantically clutching at the yielding substance of the ground. Struggle as he would, the force of earth gravity had clutched him in its powerful grip and he was slowly but surely forced to yield his momentary hand-holds upon the sides of the crater. Only the lightning-like action of Scott prevented the conversion of one, Gordon Bancroft, into a human meteor, to fall with nauseating speed headlong towards the earth where he would perish in a flash of incandescence upon reaching the denser atmosphere.

When he saw his friend disappearing Scott threw himself flat upon his stomach and dug the toes of his enormous shoes into the soft ground, and at the same time clutched out in the direction of Bancroft's body. He barely managed to grasp the heel of his webbed shoes but he held on. For a minute it was nip and tuck, with the forces of gravity beginning to win. For one horror-stricken moment George's toe-hold upon cloud-land broke loose and both men began to slide towards eternity. George kicked his toes into the ground furiously again and again but each time they tore away. True, he could save himself by releasing his friend but he never even entertained that thought. They would live or die together!

In that instant he thought fast. The toe-hold would not suffice to retain the double weight. Some other restraining anchor would be needed. Then like a flash it came to him as both bodies were sliding more rapidly down the slope of the crater. He tore at his belt with one hand and pulled his axe loose. Furiously he lifted his arm and put all the strength that his cramped position would permit into that blow. The blade of the weapon sank into the ground as it would into soft cheese. There was a momentary tearing, but the axe held. And the hand that clutched its handle in a vise-like grip was there to stay.

At once the sliding of the bodies was halted. George pulled and tugged on the heel of his friend's shoe and with superhuman effort drew him up even with his own body. Bancroft was far too exhausted to speak but his eyes were eloquent in their message of gratitude. He managed to squirm around and resting his feet upon Scott's shoulder he pushed himself up to safety.

"That—was—close—George—" he panted when the other man rejoined him. "Look, look there, the hole is closing in!" Even as they watched, the ruddy semi-solid clouds rolled across the hundred foot chasm until all trace of the former dangerous pit had vanished. They found out later that this phenomenon was quite prevalent in this treacherous region which comprised about one half of the area of this world and was therefore carefully avoided by the inhabitants. They reflected that there was some danger that their ship would be swallowed up in this manner, but as they were powerless to move the flyer it was a chance that they were compelled to take. The meteor-man who had been discovered in Florida had probably fallen to earth as a result of one of these "cloud storms."

Some Life to be Seen at Last

THEY proceeded more cautiously now, watching closely for the dreadful pockets, until they were in plain sight of the strange city. Not a single sign of life had they seen yet, although the ground and the air had been subjected to close scrutiny during their travel. But now a loud droning could be distinguished and a swarm of insects buzzed past them.

"The same species that I showed you in the laboratory. See the gas sacks bulging on their backs." Bancroft was alert as he stopped to study their movements. The appearance of the insects seemed to herald the emergence of other forms of life. Small, densely packed creatures were swarming out of their abodes like bees out of a hive. The earthmen were still too far away to be able to distinguish features, but the inhabitants of the new world walked erect and apparently had some form of organization for they were all hurrying towards a central structure that towered above every other building in the city.

"We had better prepare ourselves for any kind of a reception," Gordon cautioned. "This is a good time to load our Kuntzlers." These were electrically operated machine guns, shooting a highly explosive bullet that was powerful enough to kill ten people should they be anywhere within the range of the deadly high tension electric discharges liberated. The magazine held a hundred cartridges and each man carried three refills, or a total of 800 rounds. Enough ammunition to wipe out a regiment under favorable conditions.

"I hope we don't have to use them. I would rather deal peacefully with people, especially creatures of a strange world, who might have far outdistanced us in the invention of devilish weapons of warfare," Gordon was saying as he watched his friend caress his Kuntzler fondly. Scott did not answer, but his expression was an eloquent denial of his unwillingness to engage in a good fight.

The buildings took definite form now. They were all constructed in a uniform manner from large spheres of yellow, red and orange tinted translucent material.

The globes were about twenty feet in diameter, apparently hollow, with circular doorways and windows cut through. The height of the structure was governed by the number of these units assembled on top of one another, in the same way that cannon balls are piled up near old-time artillery in public parks. It was obvious that the meteor-men had applied mass production principles and standardization to the Nth degree in their civilization.

The City and Its Inhabitants

AS the two Earthmen came abreast of the first group of buildings they discovered that several hundred of the creatures had assembled to meet them. It was quite evident that news of the arrival of the strange ship with its outlandish crew had, by some mysterious agency, been transmitted to these people. Bancroft and Scott stopped and gazed at them. At first glance they were a weird looking lot. Even upon closer scrutiny their appearance was different from the wildest conception of a human being. Their faces, which were turned towards the Earthmen, were as red as burnished copper; in the direct centre three slit-like orifices were set where the nose should have been, above which two tiny beady eyes projected beneath a low bulging forehead. The mouth, if it could be dignified by such a term, was no larger than a ten cent piece and perfectly circular in shape. The characteristic hump between the shoulders, and the webbed feet would have been the first anatomical curiosities to attract attention, but the two men had come to expect them since the finding of the Florida meteor-man. Their arms were short and thin, terminating in claws.

They shuffled about restlessly. Their ludicrous large feet sank and rose spasmodically in the soft ground. They were innocent of clothing in the usual sense of the word, their bodies being encased in a skin-fitting sheath composed of material that looked like finely spun glass which flashed iridescently in the brilliant sunlight. The multitude appeared to be without weapons of any recognizable sort, for which Bancroft was thankful. A persistent, low sound, weirdly musical, was emitted by them.

The Leader of the Strange Beings

THE earthmen stood there, waiting for the creatures to make the next move. Just when George felt that he could no longer suppress his desire to laugh aloud at the queer appearance of the people, one of the copper colored meteor-men detached himself from the multitude and came toward them. Judging by the deferential attitude of the others this person was undoubtedly one in authority. He thrust his head close to the Earthmen, scrutinizing them from head to foot and whispered in a low chant. This musical speech was meant to convey thoughts that are expressed by the inhabitants of Terra in separate words.

Bancroft shook his head to indicate his inability to understand their language. "I'm afraid that we are stumped when it comes to carrying on a conversation, unless we can get them to interpret sign language."

But if they had any doubts regarding the intelligence of these creatures of the neutrosphere they were soon dispelled when the ruler, seeing that his visitors indicated no comprehension of his language, beckoned to them to follow him as he led the way toward the center of the city.

"This looks like a royal reception to me," Scott laughed as they marched along, doing their best to keep up with the faster pace of their hosts.

"Yes, it is better than I had hoped for. Did you take notice of the groups of creatures gathered around the outer fringes of the city. Unless I've missed my guess there is something up. Looks as if they were stationed there to guard the place against invasion. And see those tanks they are carrying. Perhaps they use them in warfare."

It did appear that there was tenseness everywhere, reflected in the attitude of the inhabitants who looked furtively toward the open country in the direction opposite to that whence the earthmen had come. And preparations were being hurried within the city as more men left their houses carrying tanks. George was on the point of asking the meteor-man ahead what all the commotion was about, when he realized the futility of the English language in this world.

The leader stopped abruptly before an immense structure that towered three hundred feet above the ground and beckoned to them to enter. The chamber, into which they were directed, resembled the inside of a huge sphere, with a high vaulted ceiling that glowed with purplish phosphorescence, casting a weird unholy light upon the copper-colored faces of the creatures, that transformed them into terrifying monstrosities.

An Unexplained Tension Is Evident in the City

THE room was entirely devoid of furnishings, more like a drill hall in an armory, and the earthmen wondered what would transpire in this vacant chamber. However, their host did not leave them in suspense very long; he pulled a lever, releasing a cloud of dense gray vapor in the center of the chamber. Before their eyes the grey mist slowly condensed and solidified into a circular pillar some ten feet in diameter and about three feet high. Its top molded itself into a level surface that was as smooth as polished marble. Around this table a circular bench assumed shape. The earthmen were taken aback by this demonstration of magical metamorphosis and touched the bench gingerly before sitting down. It was soft and elastic, yet rigid enough to support their weight. A perfect pneumatic cushion of the neutrosphere world! These creatures were beyond doubt wizards in the art of controlling gases.

The leader gave a command in a low pitched, pleas-

ant chant, whereupon a group of meteor-men, who Gordon and George afterward learned were the Council of Fifteen, shuffled stiffly into position around the table and sat down. As if of one accord they turned their immobile features toward the Earthmen, turned and gazed inscrutably with incisive, bead-like eyes at the two outlanders who had come to visit them. The immense room was now filled to the overflowing. Citizens of this cloud-land had jammed it solidly. There they stood, waiting in silence, swaying restlessly, nervously. The same air of tenseness and apprehensive dread which the two had already sensed prevailed, seeming to portend some calamitous event.

Here in this chamber, it was evident, a meeting of great importance was to be held, and Bancroft and George were expected to take a prominent part in it. It was hardly possible that they were in physical danger from this race which so far had shown them nothing, but deferential homage. In fact, it might be said that they were looked upon reverently as superior beings capable of accomplishing miracles.

The Earthmen sat and waited. How could they make themselves understood where no common language existed? That was the problem Bancroft tussled with in his mind. Then from the lofty ceiling the answer to this puzzling dilemma came. The room was suddenly enveloped in pitch black darkness. Then directly above them a luminous circle appeared, changing slowly from a cloudy gray to a translucent pale blue. For a moment they imagined that a skylight had been opened and that they were viewing the sky overhead, only the "sky" in this world had a reddish tint, instead of blue. Then the monochromatic circle was broken up by faint moving images in color as if painted there by an unseen hand.

A "Talking" Machine for Communications by Pictures on a Screen

"A TALKING or thought machine!" Bancroft exclaimed, "It translates thoughts into pictures. See, he is holding the control tube in his claws. Watch the screen, he is talking to us."

The faint image resolved itself into a definite shape; a large flattened oval figure was displayed, on top of which heaps of tiny cannon balls were clustered together in symmetrical piles.

"He is showing us a picture of their world—that must be the city we are in. See that tall pile of buck shot. I would say that it's the very building the two daring stratosphere explorers are learning their new ABC's in." George leaned over and whispered.

They riveted their attention upon the picture. A thin line of red light flashed brightly and pointed directly at the large oval. At the same time Bancroft felt the chief's claws pinch his shoulders.

"Plaa, Plaa," the copper-faced man sang into his ear, repeating it again and again while simultaneously the red pointer glowed vividly to identify the object he named.

"Plaa, Plaa," the Earthmen repeated after him until they were able to give a faithful imitation of the sound. The meteor-man next indicated himself and sang, "Luuo," followed by the names for buildings and other objects which were instantly displayed on the screen.

This first series of thought pictures was, however, merely introductory to the more serious things they were to learn about. Even as the descent upon earth of creatures from another planet would have rocked to the foundations the equanimity of the inhabitants of Terra, so on Plaa the arrival of the two outlanders was considered to have an auspicious significance. Watching the thought-pictures, they realized that Luuo and his people were in danger, frightfully grave danger, and the two strangers from some distant world had arrived just in time to save them from absolute destruction!

The Country of Plaa and Its Troubles

"A FINE mess we sailed into. Saviors of the copper-faced creatures of Plaa," and then Bancroft sighed, "Avariciousness is the root of all evil everywhere. It brings about war and bloodshed. It is not confined to our earth alone, but must harass the lives of even those who live under ideal conditions.

"But we are in it now, up to our necks, whether we like it or not. And from what Luuo has just told us, his enemy is a thorough scoundrel who for the safety of these gentle creatures should be eliminated." The scientist's chin had a determined angle. He was now thoroughly in sympathy with his hosts. And as for George, that worthy was already fondly caressing the stock of his Kuntzler.

The pictures had truly revealed a critical condition. The preparations they had witnessed were being made for the purpose of repelling the invasion of a huge force of outlaws under the command of an unscrupulous schemer called Ree, who had at one time been Luuo's right hand man. But he was not satisfied with the peaceful existence and the slow even tenor of life in the City of Urrplaa, as the capitol they were in was known. Finally he became so tyrannical in his demands that Luuo was forced to banish him. Ree's greed for complete dominance over the race of Plaaians, and his intensive desire to annex the formula of the Gas of Life, had influenced him to secretly organize a horde of malcontents into a vast army. This army was at this very moment encamped upon the lowlands, not far from the city, where they were reported to be awaiting the signal for attack.

How long this would be neither Luuo nor his people knew. Each moment added to the suspense, while the citizens milled about in apprehensive dread as fresh news brought in by Luuo's spies magnified the might of the enemy forces. No people, least of all a peace loving race such as this, could long endure the intolerable strain of the unknown.

The Impending War and the Weapons

WHEN the last thought-picture had faded into the background of the screen, George began to lay his plans. To him war was a game, a dangerous but absorbing game, one in which he must defeat the enemy through superior strategy. And if he was to play this game in a land where the rules were unknown to him, it was first necessary to learn about the offense and defense of his opponents as well as to take stock of his own strength.

"The first thing to do is to become familiar with the weapons they use. We'll have to learn their whole bag of tricks in jig-time, if we are to be of any help." Gordon looked at him thoughtfully as he answered. "I have been searching carefully for anything that might be classed as a weapon ever since we arrived here, but can see nothing that even remotely resembles our conception of armament. Unless we include those cylindrical tanks they were carrying—now I wonder," he pondered a moment, "yes, by Jove, I'll bet they contain either a poison gas or something even more infernal," he added with conviction. "I'll ask Luuo."

He reached for the tube of the thought machine. As he concentrated upon the subject a picture of a tank appeared upon the screen. The Council of Fifteen looked at it and spoke earnestly to one another. They nodded their heads, whereupon Luuo gave an order to an attendant. At once a hushed silence pervaded the immense chamber. The drone of whispering ceased and the shuffling of the multitude was transformed into rigid attention. The Earthmen looked at Luuo quizzically. They were plainly puzzled. But if the meteor-man saw them he did not respond to their appeal. His stringent mouth was even more closely compressed, his beady eyes flashed with a fanatic light.

The Captured Spy and His Threatened Fate

AT the far end of the chamber they heard a commotion. Then a cry, piercing and agonized, like that of a frightened animal, made the chills creep up and down their spines. The ranks of the tightly pressed multitude parted to permit the entrance of a soldier carrying a tank. Directly behind him two other soldiers half-dragged and half-carried a frightened meteor-man. He struggled frantically, his claws thrashing the air, vainly trying to clutch some restraining anchor, anything to retard his progress into the chamber where sat the Council in silent, impassive dignity.

A space had been cleared in the center, and the hysterical man was pushed into it. Immediately he leaped toward the refuge of the crowd, but the soldiers were upon him and he was dragged back roughly. When he again attempted to rush to safety he found himself rooted to the spot. The disk upon which he stood emitted a purple ray which prevented his escape by binding him more securely than would bands of steel.

The soldier with the tank reached for its nozzle and turned it toward the terror-stricken man. The Earthmen had been following this drama with mixed feelings. Up to this they had been perplexed, but the import of the soldier's action was apparent.

In a flash George jumped up and with one bound reached the tank-bearer. His powerful fingers encircled the man's arms and held him as helpless as a baby. The nozzle of the tank dropped harmlessly and dangled in the air. Then like the surge of a flood tide upon the shore, the heretofore silent throng of Plaaians rumbled deeply, menacingly. They moved, as if motivated by a primitive urge, by an unspoken command, toward the two outlanders who had dared interfere with the wishes of their noble ruler.

Bancroft saw the danger. He leaned over and clutched Luuo's shoulder, shook him as if to awaken him to his responsibility. But he did not rely entirely upon that individual to save his friend from the mob. He swung his Kuntzler smartly from his shoulder and released the catch. The muzzle was pointing right into the densely packed crowd. Here at close range the weapon would do deadly work.

"Watch out, George, they are preparing to rush you. Fall back, I have them covered."

Whether or not Bancroft's action would have saved them from the enraged Plaaians they never knew, for Luuo leaped upon the table and shrieked a peremptory command. The surging copper-faced mob froze into immobility. Their arms which they had been flailing wildly in the air dropped to their sides. The angry murmur ceased. Absolute silence. Then slowly, reluctantly they fell back before a gesture from their leader. Bancroft lowered the muzzle of his electric machine gun and Scott released the tank-bearer's arms.

What might have been a catastrophe for the Earthmen had been narrowly averted, but during those few tense moments an impression of the stolid obduracy, that took possession of these normally peaceful people, had become etched indelibly upon the minds of the two. Swayed by fanaticism there was no telling to what extremes of atrocious cruelty they might have gone. From now on they would take no unnecessary chances, nor trust this race too implicitly. But as if to make amends for the rudeness and breach of hospitality displayed by his followers, Luuo became humbly apologetic. With a conciliatory gesture he stroked the Earthmen's arms caressingly, a sign of friendliness and greeting in the land of Plaa.

He explained by means of the thought machine that the victim was Ree's spy who had been caught attempting to destroy one of the laboratories within the city and as a penalty he was to be sacrificed in the interest of science. This was strictly according to their laws of justice.

"We can't quarrel with that," George admitted, "they at least have something in common with our own military commanders."

"No, we cannot, and it would hardly be advisable to stop them. Apparently they wish to demonstrate

their gas weapon on a live victim. Ugh, I would rather not see it, but it can't be avoided."

As the two stared with mixed feeling, the soldier once again picked up the nozzle of the tank and directed it at the rigidly erect spy. Some spark of patriotic fervor must have pervaded the man for he no longer cringed and cowed in abject fear, but glanced about him with stoical resignation that transformed him into a noble martyr.

A Strange Execution

A CLICK of a lever and a bluish gas hissed out in a dense rope-like stream, coiling around the victim as if it were a helical spring. Almost immediately upon contact with the air the gas solidified and then contracted like a giant boa-constrictor wrapped around its prey. There was a muffled cry. The two looked away, and when they again found their eyes drawn irresistibly to the scene, nothing remained of the unfortunate man but a little heap of dust. The gas, too had disappeared entirely, leaving only the remains of the spy, converted by the terrific pressure into their original elements.

Bancroft and Scott shuddered as they turned back to the council table. Here was a force powerful enough to discourage the bravest, yet they were to battle an army equipped with such terrible weapons.

"There is one salvation," George reasoned, "the range of their gas-rope must be strictly limited, and then again there might be some defense against it."

In response to his questions, Luuo explained that the only safeguard was to remain beyond its range, which he indicated as twice the length of the chamber. Closer than that—well, it was just too bad for the victim!

"That's about a hundred yards. We can pop them off before they get us within range. And didn't Luuo explain that the gas was the only weapon the Plaaians had to greet unwelcome visitors with?"

"Yes George, but what a devilish embrace that provides. Like taking a pleasure trip through a rock-crusher. Now I wonder about edged tools and knives or axes. Question them about it. Show them your hand axe."

"Here," Scott called to Luuo, drawing the axe from its sheath and exhibiting it for the meteor-man's scrutiny. "Have you anything like this?" He spoke in English, but Luuo evidently understood the question, for he examined the weapon with interest, feeling the edge with his sensitive claws. He waved his arms in negation.

The copper-faced man carefully explained that all articles used on Plaa were composed mainly of elements extracted from the atmosphere which was rich in gases unknown upon the earth. These elements were united by a synthetic process into materials and gases that went into the manufacture of all articles used by the Plaaians. Even food, which they absorbed in a highly concentrated form, and liquefied vapor which took the place of water, were prepared by chemists in the vast laboratories. Would the visitors care to see these things? If they would not be too bored by re-viewing something with which they were surely familiar. The men nodded. Whereupon Luuo, beckoning them to follow, led the way down an inclined passageway to an underground spherical car. They entered and sat down.

The Laboratories of Plaa

SILENTLY like a large rubber ball, the car rolled through the tunnel. The two instinctively clutched the seats, expecting to be tossed on their heads. But to their relief nothing of the sort happened, and they remained in an upright position, while the outer shell of the sphere revolved around them at a tremendous speed, carrying them to their first stop.

Here in an immense laboratory they saw the Plaaian chemists absorbed in their task of mixing mysterious gases in huge tanks and flasks. Before their eyes was revealed magic of transformation that even the most visionary alchemist would have gazed at incredulously. Inert vapors were transmuted into solid shapes; sheets of translucent material, resembling colored glass, were turned out with miraculous speed from a device that consumed gaseous raw material piped into it through scores of tubes. Then, too, they saw the manufacture of tanks of the deadly gas-rope. This substance was handled with great care and respect, for the virulent gases had to be kept out of contact with the atmosphere.

These and many more wondrous processes were examined until their heads were swimming with the marvels they beheld. To learn the secrets of these miraculous chemists and to bring their formulas back to the people of the earth conjured visions in Bancroft's mind. Only a scientist could fully appreciate the astonishing things he had seen. A layman would only stare at miracles he could never hope to understand. Here was a worthy objective for Bancroft. In place of collecting and studying the flora and fauna of a new land as he had determined to do before he left the earth, he would bring to his home-planet something inestimably more valuable, substances that were sure to revolutionize the entire scheme of things upon the earth. He would, of course, gain the confidence and consent of Luuo, which should not be a difficult task after they repelled Ree's army. And if they were unable to beat off the enemy it would make but little difference anyhow.

Upon their return to the council building they stepped into a narrow shaftway where compressed gas blew the platform upon which they stood skyward and they alighted on a circular balcony high above the city. Here food in the form of tiny tablets was brought in. They turned the pellets around in their fingers gingerly, wondering what to do. After watching their host, they followed his example and placed them in their

mouths. The substance tasted not unlike medicine and was apparently flavored to make it palatable. The function of eating was indeed a simple one in the kingdom of Plaa. The food tablets were extremely nourishing for Gordon and George sensed a feeling of well-being and satisfaction that follows a good meal.

Unexplained Excitement of the Plaaians

THEN an incident happened the reason for which neither Gordon nor George could understand until many days later. George took a cigarette from his case and placed it into his mouth. This was to be his first smoke in the new world for the wanderer had been too engrossed to think of even his beloved tobacco. As he scratched a match against its box and a flame appeared the Plaaian loosed a raucous cry of fear and jumped straight at the astonished George, seizing the match and clapping it out between his claws. George recovered from his surprise quickly and was just measuring the meteor-man's round chin when the latter bowed before him humbly and began gesticulating in explanation.

"He says that he is sorry for his rudeness," Bancroft interpreted. "He and his race have an ingrained fear of fire for some reason that I can not understand, but if we value our lives he cautions us never to start one any time on Plaa."

Their host regained his composure and indicated a series of tubes hanging in a recess in the balcony. The ends were equipped with funnel-shaped nozzles. Luuo selected one and placing the nozzle over his tiny circular mouth, pushed a knob in the wall. He made a slight sucking sound as he drew on the tube, and motioned to the others to join him. The two looked at one another, then Bancroft nodded. They picked up funnels and held them to their mouths, pushing the associated knobs. A melliflous liquid struck their palates.

Almost immediately they felt exhilarated. A warm glow crept over them and they contemplated Luuo with a new light of good fellowship in their eyes. This must be the nectar of the gods, George thought, having none of the ill effects of the drugs or alcoholic liquors of Terra. The fluid had a narcotic effect and he dozed off and fell into a deep sleep. How long he slept he could not guess, but after looking at his watch several times to make sure he could not be mistaken he found that the instrument had not ticked off more than two minutes. He glanced at Gordon. The scientist was just awakening from his after dinner nap, as he stretched himself comfortably. The effect of the concoction had worn off entirely and both men were their normal selves, although greatly refreshed and rested.

"This stuff has your beer and wines backed off the map, George, no morning-after headache and it works while you sleep."

Apprehension Among the Inhabitants of Plaa

HIS light pleasantry was now brought to an abrupt end by a surge of apprehensive cries from the street, which rose in volume until it was one vast shriek, like a fire siren. The gas-phone on the wall was singing excitedly and Luuo listened anxiously to its message. The watching Earthmen saw the copper hue of his face fade to a pale yellow, saw the small mouth draw together tightly as the ruler of Plaa tensed his lips in determination. He turned to his guests. With a sweep of his arms he indicated that the city was surrounded by the enemy.

As Gordon and George looked down upon the excited multitudes, Luuo sang into the transmitter of the instrument in a deliberate, calm tone, giving orders to his army and reassuring his people. The voice of their leader coming from a powerful amplifying device had a stentorian ring. It served to quiet the panic-stricken masses to some extent, although they still surged about as if seeking some happy escape from the portentous threat of the impending battle.

The Armies in Battle Array—The Earthmen in the War

ON the outskirts of the city, Luuo's soldiers were valiantly defending their capitol against the greater forces of Ree. But even as Bancroft and Scott watched, they saw the lines of the defenders break like a sea wall that was unable to withstand the pounding of the mighty waves. The situation was desperate and would brook no delay.

The two Earthmen and the ruler of the Plaaians rushed to the compression lift which dropped them speedily to the street. They held a hurried council of war to consider the defense of those places that showed the greatest weaknss.

George's eyes sparkled at the anticipation of the coming battle. This was just his dish—the sort of thing he loved so well. A natural born fighter, he was in addition well-schooled in military tactics which were to stand him in good stead at this time.

"We must separate," he said to Gordon, "I will rush over to the other side of the city while you take care of the invaders over here. Then you must work your way toward my original position while I circle around toward yours. Only in this manner can we hope to cover the entire city," were his parting words as the two men shook hands and were off for their respective posts. There was no time for sentiment now; there was work to be done. Yes, men's work, a fight in which George gloried. The trip was worth while after all, to his way of thinking.

He sped, as fast as his awkward, webbed shoes would permit, in the direction of the greatest din. As he drew near to the fighting forces he could see the deadly use to which the gas ropes of both armies had been put. Men were lying on the ground, bound helpless, with tentacles of solidifying vapor fast crushing them into

shapeless pulp, into dust. Hand to hand encounters were numerous and whatever he may have thought at one time about the physical prowess of these people, he was now covinced that they were not lacking in courage.

George examined the magazine of his Kuntzler electric gun. Then throwing off the safety catch he pointed the muzzle out over the heads of the front rank of combatants to avoid hitting the defenders, and opened her up.

Carrying Out a Plan of Campaign

AS the first bullet exploded with a flash of fire and a sharp detonation among the densely packed hosts of the enemy the creatures in both armies uttered cries of terror. They covered their eyes with their claws in abject fear as if expecting the direst of calamities to overtake them. Even Luuo, who had so far preserved a calm imperial dignity, hissed shrilly and clawed at George to wrest the terrible flame-thrower from his hands. But George was impatient to follow up his advantage and shook off the meteor-man's grip as he trained the muzzle of his Kuntzler at the opposing ranks and blazed away. The inherent fear shown by the Plaaians upon seeing the flash of the bullets was the same panic stricken terror Luuo had exhibited when George lit the match. Later the earthmen were to have brought home to them, in a most horrible manner, the reason why these creatures were in such abject fear of fire.

The deadly work of the exploding bullets left great gaps in the densely packed followers of Ree; hundreds of the enemy Plaaians were mowed down like wheat before the scythe of a reaper. Their losses coupled with their ingrained fear of the fire-flash sapped their morale and they became panic stricken, turned about and fled. George, losing no time, beckoned to the exultant warriors of Luuo's army to follow him and proceeded to circle the town, shooting his way through the retreating masses of the enemy who melted away like a light fall of snow under the spring sun. In the distance he could hear the rat-tat-tat of Bancroft's gun and knew that he too was giving Ree's followers more than they had reckoned with.

George was sure that the tide of battle had turned definitely to their advantage. The opposing hordes were in full flight and he could relax his vigilance for a moment. Not being accustomed to the clumsy footgear he wore his legs were weary from the stupendous exertion to which he had subjected them and they felt as if they would collapse under him. Suddenly he whirled about at a shrill warning sound from Luuo who had managed to stay close to him throughout the fray. Not more than a few yards from him one of Ree's soldiers, finding his escape cut off, decided upon a bold stroke that might prevent him from falling into the hands of his enemy. He was just lifting the nozzle of his gas tank to aim it at George when Luuo's cry warned the Earthman. The magazine chamber of his gun had discharged its last projectile and there was no time to reload. Whatever was to be done must be done instantly.

A Personal Conflict with One of the Enemy

THE athletic body of George responded to the demand. He sprang through the air, encumbered as he was by his clumsy equipment and struck the man full in the middle. The force of the impact would have knocked out any other man, but this Plaaian was far from beaten. He twisted and squirmed until his short arms and steel-like claws encircled George's throat and cut cruelly into the flesh. The earthman knew that it would not be long before the claws would sever his windpipe or artery unless the hold was broken at once. He doubled his fists and brought both of his arms upward, close in near his body, and sent the full force of his mighty muscles to the meteor-man's sloping chin. His head shot backward with a snap as the spinal column was severed by the blow. The claws opened and the copper-faced creature lay writhing on the ground. It happened so quickly that Luuo and his men had not the time to aid before it was all over. Luuo rushed to help George to his feet. To his solicitous inquiry the earthman moved his body and shook his head to indicate that he was unhurt.

They continued their sortie around the outskirts of the city until every trace of the attackers had vanished in the distance. George was by this time the center of an admiring throng of soldiers and citizens who bowed in obeisance as he passed. He cut through the center of the town in the direction Gordon was scheduled to be, and came upon his friend enthroned on the shoulders of two stalwart Plaaians. He had suffered no harm and seemed to be enjoying himself immensely.

"Hey, George," he shouted gaily when he caught sight of him, "that was a thoroughly enjoyable fight. And the best part of it is that neither of us is hurt."

"Yes, I feel as fit as a fiddle, except for my legs, which are ready to cave in under me. I see you had the right idea in letting those fellows carry you. The next time I go to war it will be in the cavalry."

But the danger from Ree and his army was by no means a thing of the past. True, they had been repelled with heavy losses, but this had been due to a great extent to their surprise at finding two queer looking outlanders helping the defenders and using the fearful fire-throwing sticks that dealt destruction from a distance entirely beyond the range of their gas-ropes.

The Danger Is Not Yet Over

EVEN at this moment while Bancroft and Scott slept soundly from sheer exhaustion on soft benches in the quarters assigned them by the worshipping Luuo, Ree and his chemists were busy devising a new and more horrible gas. When they attacked

the first time there was no doubt in their minds that they would be victorious, for were they not entirely familiar with the weak defenses of the city? And wasn't their force superior to that of Luuo? But something had happened, yes something unexampled in the history of Plaa, something which had to be destroyed before they could hope to conquer.

The cunning chemists under Ree's command had been on the verge of a great discovery and now they pushed their researches under the stimulus of a rich reward, or in the event of failure, the fear of a horrible death. For Ree was ruthless. Of this his men were fully aware.

The earthmen slept the sleep of the weary. For twenty hours they were undisturbed. Bancroft dreamt of the army of Luuo, composed of soldiers of elephantine proportions, marching to the dangerous shifting-ground regions and lifting his space ship to carry it into the city. Then he fancied that they were tunneling right through the center of this world to make a hole large enough to release the flyer. He was awakened by Luuo shaking him vigorously. George was already up and was holding his machine gun out to him.

"There is no time to lose, Gordon, they have rallied and are upon us again." George shouted to the half-conscious scientist. "Come, let us hurry. Only this time we must stick together for mutual safety for it looks like a tough battle. Luuo says there are thousands of the devils surrounding the city."

They followed the Plaaian ruler to the spot where the fighting was the most intense. Shoulder to shoulder they stood and fired their exploding high tension bullets into the densely packed forces of the enemy, nor could they miss. Each shot told its story of a dozen dead and disabled from the electric shock. But as soon as one creature fell, two fresh ones were there to take his place.

"Ugh, I am beginning to detest this endless slaughter," Bancroft said disgustedly.

"I don't exactly relish it either, but it is either they or we. There is no half way measure; that bloodthirsty crowd is out to do or die this time."

The greatly outnumbered army of defenders was beginning to show its losses. Great gaps had been torn in their ranks which remained unfilled for there were no reenforcements available. These creatures, uncomplaining, inexorable, died like heroes, never giving an inch of ground until the cruel gas ropes crushed them, or the massed bodies of their opponents bore them under, never to rise again.

A New Contest of Earthmen with the Enemy

GEORGE and Gordon executed a flank move that brought them nearer to where the enemy commander and his staff were watching the tide of battle from the safe seclusion of distance. Throwing their Kuntzlers over on full automatic action, they fired into the middle of this group, which, after one horrified glance at their stricken companions, wavered, then turned and fled in panic. For one moment it seemed that the entire army of Ree would follow the example of its cowardly leader.

Then, at a foul, screechy command from Ree, they rallied. As the Eearthmen watched a half dozen of the attackers pushed through their unsteady ranks and leveled the nozzles of huge, cylindrical tanks at them. They were fully two hundred yards away and George smiled at what appeared to be a puny attempt to annihilate them. A red gas was exuded, but the gesture appeared futile for the jet died away before it reached more than fifty feet. At least so it seemed to the watching earthmen.

But they rejoiced too soon. The red gas was the epoch-making discovery that the chemists of Ree had labored so hard to perfect, and now the time had come for an effective trial of its unusual properties. Even as Bancroft was lifting his weapon to let loose another salvo, the trigger fell from his fingers and the barrel of the gun crumpled and the entire electric rifle disintegrated in his hands. All but the stock, which fell to the ground at his feet.

To say that Bancroft was startled is putting it mildly. He looked at George. Yes, the same thing had happened to his gun, the remains of it was lying in dust at his feet. And as George turned his body, the stag horn handle of his knife fell from its sheath, minus its blade! At the same time the two detected a sweet odor that threatened to nauseate them. The devils! They had discovered a gas that reduced metallic and probably other substances to dust. That it should have this effect upon the Earthmen's weapons was probably nothing more than a lucky accident for the Plaaians could not have had any knowledge of the nature of metals and therefore could hardly devise a means of disintegrating an unknown substance.

The Deadly Red Gas

FORTUNATELY their gas helmets and oxygen concentrators were of non-metallic construction, for otherwise it would have been instant death. The two looked about them bewildered. Those of Luuo's men who had witnessed this incident were completely demoralized. Now all their bravery was gone. Completely surrounded and unable to retreat they were fighting a hopeless, losing battle. George gripped the wooden stock of his gun; there was a grim smile on his face that could be seen through the glass window of his mask.

"Well, old timer, if we go down, let us take as many of these devils with us as we can. There is one chance, one only, and a slim one at that I'll admit. If we can outwit them by a flank movement we can try to regain the ship. She is over in that direction. Here they come. Stick together—and best of luck. If we pull through, fine, if not, good bye, old man."

Bancroft's heart was too full to reply, but he gripped the extended hand, and that grip meant more than

any number of words. With a high pitched scream the enemy closed in on them *en masse*. Fortunately the Plaaians were too closely jammed to use their gas-ropes without endangering their own forces. Time after time the sturdy walnut gun stocks descended, crushing skulls like eggshells. Time after time George's fist sank into flat, copper colored, ugly faces.

Slowly, but surely, they gained ground. It seemed almost incredible, two men against an army. But only a limited number could get near and the Earthmen, back to back, beat off those that came within striking distance as they fought their way around toward their objective. Artfully they manœuvered so as to avoid the main portion of the army.

In the distance they could hear the dim echoes of the defending army in full flight; the men were being butchered without quarter. Luuo had left them in a last desperate attempt to rally his men, and they held out little hope for his safety. Certainly Ree must be in possession of the city by this time, for there were none to oppose him—none but the blood-stained Earthmen, who surely on this day brought honor upon the race from whence they sprang. Even if they went down in defeat their mighty deeds would be long remembered by the people of Plaa, and who knows that perhaps some day other Earthmen would not come in great numbers to this cloud-world and there find a record of supreme courage which they would be proud to commemorate as a tribute to their fellow countrymen.

The Tide of Battle Turns

STILL the copper-faced demons kept closing in on them. Scott and Bancroft plied their bludgeons until their arms were tired from the steady rise and fall of their crude weapons. Then when they felt that they could not possibly muster another ounce of strength their arms kept on striking mechanically, endlessly. Their percussive blows could be heard above the howling of the blood thirsty devils.

The two companions no longer thought of weariness, that was a thing of the past, yes many hours past. They no longer thought in terms of time. To them remained but a single thought—to surmount this barrier of living, moving creatures, and reach the ship. Surely they could do it! No ignominous death would be theirs!

Now it seemed to their misty eyes that the crowd of copper-colored bodies in front had thinned out. Yes! they were almost through with not more than a score of the enemy between them and their goal. Just as the open space was almost within reach, Bancroft toppled and fell to the ground from a blow dealt by a Plaaian. A whistling shout of triumph arose. Now finally it looked like the end to George. He could get through himself but he never even considered abandoning his friend.

He rushed to the fallen man and lifted him to his shoulder. Then using his football tactics, he dogged and bucked his way past the few remaining Plaaians on the flank of the army. Then it became a foot race. George encumbered by the weight of the scientist and hampered by his enormous webbed shoes, was nevertheless able to summon sufficient strength to keep ahead of his pursuers. But it was positively beyond human endurance to drive his body and subject it to such cruel punishment for long; there must soon be a breaking point. Fortunately for both, Bancroft stirred, muttered something and regained consciousness, not a moment too soon.

"Let me down, George, let me down. I think I can—my God, man! Have you been carrying me? Why didn't you leave me——" the dazed scientist muttered as his eyes took in the full significance of what had happened. But George interrupted his words to urge him to run as fast as his legs could carry him in the direction of the ship.

They reached the fringe of the dangerous shifting-ground territory. Here the pursuers hesitated as if fearing to follow. Then a tall Plaaian, waving his arms wildly and exhorting his men to come after him, gave chase to the Earthmen. His legs were powerful for he covered the ground with extreme rapidity. The soldiers, incited by their leader followed him, although at a much slower pace. They were reluctant to risk their lives in this treacherous region.

The Leader of the Enemy at Last

"HE must be Ree," George panted, "let me deal with him, you are hardly in condition to stand any more." And as the Plaaian, with a demoniacal leer on his ugly face, hurtled toward him, George deliberately stepped right in his path. The two bodies met with a crash that could be heard plainly in the still air by the army almost a half a mile away.

Ree possessed amazing strength and had the advantage of being comparatively fresh, for he had kept himself aloof from the actual fighting. But now, probably to appease his vanity before his soldiers, he attacked the exhausteed Earthmen, never for an instant doubting the personal glory that would be his following an easy victory.

As the two grappled, Ree's hand cunningly stole to his belt and fumbled for a small pouch that hung there. He succeeded in releasing a long slender tube and was beginning to bring the nozzle up behind George's back when Gordon shouted a warning.

"Look out for the gas gun behind you, George." He was heard. George's hand shot behind his back and grasped the tube. Ree hissed sharply in fright as the outlander wrenched his weapon violently from his grasp and hurled it from him where the black vapor oozed out harmlessly on the ground.

George was angry now, but did not let his temper get the best of his judgment. He seized the Plaaian's throat in a vise-like grip with his right hand while he curled his left arm around the man's body at the waist. Then throwing his knees into the small of

Ree's back he doubled the man's body over it. Ree shrieked horribly as he writhed in agony. The shriek rent the air and put stark fear into the hearts of his soldiers. They recognized it as the death cry of a stricken man and hastened to help him. But the steady relentless grip of the Earthman had twisted his enemy's body almost into a circle until his neck snapped and the copper-colored head fell backward on a trunk that at once became limp and lifeless.

The short but desperate struggle had ended none too soon, for the frenzied demons of Ree were almost upon them.

Flight to the Space Ship—Home

"COME, George," Bancroft shouted as he gripped his friend's arm to help him to his feet. George's athletic body was exhausted from the Herculanean task imposed upon it. "Only a little farther. We must hold out. Run, run. They are coming!"

Again the two were racing for their lives, with the ship, lying half buried in the cloud-ground, not more than a quarter of a mile away.

They looked back. The brilliant sun shone with an evil glint upon the copper-colored faces of the pursuing devils. Slowly, but surely, they were closing in on them. Putting their last bit of reserve energy into it, the two bounded forward like stricken reindeer. At the side of the ship they tumbled down the bank and tugged frantically at the air-lock door. It swung open. They clamped the inner door shut and ripping their helmets from their perspiring faces, dropped to the floor inert from weariness.

Life during those moments was indeed at a low ebb for Bancroft and Scott. Little pools of red oozed from their torn bodies and clotted upon the metal floor. Their throats were parched and caked; breathing was only possible after enduring excruciating pain. Little they seemed to care in the twilight zone whether they lived or died. Everything was a gray haze, and through it their minds fastened upon one weird nightmare after another. Was it all worth it? Of what avail, Bancroft thought, would the temporary security of the space flyer be when a blast of the red gas could disintegrate the metal that encased them as completely as fire would burn paper.

"Burn!" Bancroft muttered. He sat up with a start. He reached over and tugged at the half lifeless body of George. "Burn, fire," he repeated. "That's it. Get up. There's a chance! A gamble," and his voice mumbled incoherently of cellulose and guncotton as George staggered unsteadily to his feet.

Outside the Plaaians were tearing against the metal with their claws and clambering on top of the ship. They were seeking an opening.

"They have found the door. Listen to them tearing at it. What is it, Gordon, this idea of yours?"

"Here it is. See that tank? It's liquid fire. Grab it. I'll open the upper observation window while you thrust the nozzle out. Baptize them. Give them a singe! And if my guess is right—and we are not roasted—we shall have dinner on earth to-night!"

The peace-loving, gentle nature of the scientist had been whipped into a savage frenzy by his inherent desire for self-preservation. In the dim light inside of the ship he seemed even ferocious as he squared his shoulders and gave terse orders to George.

As the glass panel slid back Scott directed the nozzle outside and opened the valves. A stream of hot flame issued and curled around the densely packed meteor-men on top of the ship. They howled in anguish as flesh and bone dissolved before the fiery blast. Then as the flame crept down the sides of the craft toward the soft ground, a wail of fear and lost hope came from hundreds of throats, as if some cataclysmic disaster was about to befall them. When the first tongue of the red hot blast touched the ground there was a blinding flash and a cloud of white smoke. Then the flame spread like wildfire, devouring the cloud land as if it were celluloid!

It was now that the two realized why the Plaaians had cringed at the sight of the match flame and the fiery flash of the exploding bullets. While in a semi-conscious condition after he had regained the ship, Bancroft's mind had struck upon this fantastic possibility. It was worth a chance—and his hunch had been right.

"The entire world of Plaa is on fire," George yelled a warning to Bancroft as he quickly pulled his head back through the hole. "Close the windows before we are roasted or lose all of our air."

By now the walls of the ship were becoming almost intolerably hot. Outside through the observation window they could see nothing but white hot flames, the whole universe in one solid sheet of flame, with the Plaaians enveloped in a shroud of fire. It was horrible.

The ship lurched and settled lower. Then something gave way and they were falling right through the center of the flames back toward the earth. Gordon worked frantically to start the ray machines. They turned over with a hum, and as he applied the force their momentum was checked until the ship was dropping at a safe rate of speed. Occasionally a burning mass fell past them and they shuddered as they recognized the badly mutilated, flame-consumed bodies of the meteor-men.

Their last hours upon Plaa had been so exhausting, and the climax of their stay so horrible and unexpected, that Bancroft and Scott were in no mood, either mentally or physically, for words. They navigated the ship in silence, each wrapped in his own thoughts. Now that they were about to regain the earth and meet their old friends once more, what effect would these adventures have upon them? Would they be able to settle down to the humdrum of everyday earth life, or would they yearn for new and strange worlds? These thoughts flashed through their minds as they continued their descent.

Finally they were within plain sight of the earth

(*Continued on page* 455)

Head Hunters Fooled and Foiled

STRANGE INTERVIEWS

Kidnapped Ivory Expert, Here for Rest, Escapes Hostile Jivaros

By Paul Drennen

"YES, sir, you are exchanging conversation with the man that had the world's ivory industry in the palm of his hand. I'm not talking about baseball-elephant ivory. I had the Ivory Coast down for a count of nine. Then up pops the strangest series of circumstances that ever crossed one human's path. The reason my head was not shrunken to the size of an orange and is not on a museum shelf or being kicked around a Jivaros village is because—well, because I used strategy and kept my head."

In radio parlance, to the above paragraph would be added: "This is H. Burbank, spelled B U R B A N K, horticulture magician, speaking to you from the Best Hotel, Upper Manhattan." I was the sole auditor of the Burbank network and picked his name from the hotel register because of a hunch. The hunch was that if I didn't bring back an interview with one of New York's visitors, I wouldn't eat—at least not at the expense of the sheet of which a modern John Smith was the editor.

"Yes, sir," continued the gentleman whose skin is one of the best specimens of the ravages of tropical malaria extant, "I spent over thirty years in the jungles of South America developing tagua production. Know what tagua is?"

"I'm just a bit rusty on mineralogy," I parried.

"Tagua is not a mineral. But lots of people are just as ignorant as you and then besides hotel reporters ain't mental giants anyway or they wouldn't be hotel reporters. Right, ain't I?"

"Well, this depression, Mr. Burbank, has——"

"Got nothing to do with it. Either you are or you ain't. Now, as I was saying, tagua is the fruit of the *phytelephas macrocarpa* or the corozo palm. Some call it the cohune palm. I stick to the Latin name. More scientific. Ever hear of vegetable ivory? No? Well, this palm grows a nut ordinarily about an inch and a half in diameter and they are hard as real elephant tusk ivory. They tool about the same and serve all the purposes of the animal grown product. Look at this!"

In the horticulture magician's hand was a little bust of Bolivar carved from ivory to all intents and purposes. My host threw the exquisite figure with all his might on the tiles of his electric hearth and after recovering it it showed me that not even the delicately shaped nose was dented from the encounter.

"That is carved from an ivory nut," he said, adding "The wilds of Ecuador produce forty thousand tons a year. Used for buttons, mostly. Well, I am a man of vision. I saw possibilities, so I went down to the jungle more than thirty years ago—in 1899 to be exact—and began the propagation of these nuts. Get them the size of baseballs or even grapefruit and I'm a king—the ivory king."

"What stopped you?" I asked as he paused.

"Events that could transpire only in the jungle. The gods of the tropics took a hand, I guess. I had those ivory nuts growing bigger than baseballs. Thirty years it took to work out this nature miracle—years of constant hard work. Those palms come in males and females. I carried the pollen from the best males to the choicest females every day when the torrential rains gave the blossoms a chance to collect pollen. It is no fun playing matchmaker to a grove of giddy young palms and it is a daily duty 365 days per annum. I crossed the palms with other varieties to get stronger plants and bigger nuts. There were hundreds of obstacles to overcome. But I overcame them. I am persistent and resouceful and a specialist in my line."

"And those palms?" I asked.

"Guess they are where I left them, in a charming little valley in the western slopes of the Andes in Ecuador. I came out through Brazil on the east side of the mountains after escaping from the Jivaros. They held me captive over two years. Know about the Jivaros?"

"I'm just a bit rusty on my South American history," I admitted.

"Could have guessed that. Well, they are head-hunters. Tribe that held me, in the Aguarunas district—just write these names down any old way. I'll spell them for you later. Well, this tribe of Jivaros is expert at head shrinking. They take the enemy dead after a battle, whittle off their heads with their crude stone hatchets and sharpened muscle shells and then shrink them by their own secret process till they are no bigger than an orange but with all the features retained. It is a big rite with them and takes usually two days."

"I have heard of those fellows," I chimed in.

"Most everybody has then," he added in his customary complimentary way.

"Well, when I got those ivory nuts growing firm and sound and big as baseballs, I set some of my carvers to work making busts like the one you see here—only bigger, of course. They looked fine. Took a good polish and hard as steel. Then my native carvers got to dyeing them with vegetable dyes and made them look like Indians—that bronze glow. They looked natural as life. Someway or other, I ain't never figured out just how, some of those samples got into the hands of

those head shrinkers from the Aguanaras section in the basins of the Marañon and Santiago Rivers. Well, sir, those pesky Redskins thought somebody had gone them one better in the head-shrinking business and they got consarned curious about it. And blamed if they didn't send an army right over the Andes for the express purpose of kidnapping me to get my secrets. They liked the solid shiny heads better than their own leathery product. Strategy saved me from getting my own head shrunk."

"Sounds like a close shave, Mr. Burbank," I said.

"My name is H. Burbank. The 'H' stands for Houdini. I am a magician when it comes to making plant life obey my voice. You might call me Houdini if you care to. Just between you and me, my friend, I'm here *incognito*. That means that I'm sort of in disguise. I'll tell you my real name later, but this one will do for the time being."

"O. K., Houdini," I answered. "Now let me see you get out of the head-hunters' straight jacket as your namesake would have done it."

"Well, sir, the night I was captured they began pestering me to show my system of head reducing. They even brought their medicine men along to learn the secrets. It was a day or two before I found out what it was all about. If I had showed them that these heads were nothing but glorified nuts, they would have had a gala fête with my dome. So I declared times were not right for showing my wizardry. These medicine men have jars which they make secretly and never expose to the sight of the tribesmen until the reducing ceremonies demand the pottery for boiling water. I took my cue from them and played medicine man too and used their superstitions to save my neck. It took two years of figuring to make my escape."

"I'll begin at the beginning. These Jivaros are cowards. That's why they are always fighting each other. Same thing in politics. Well, after a battle, they gather up the dead, worry off the heads with their crude tools, and string them up like a catch of fish. No pity, no mercy—men and women alike. Then they go to a secluded spot and work with the medicine men and after a period of dancing and a stupefying spree, the heads are put on display—here is one of them."

Here Houdini Burbank produced from his table in the manner of a magician, a tiny head, about the size of a man's fist, perfect in form and expression. The mouth and eyelids were held closed with bits of sinew. The hair was cropped close. The skin was smooth and hard. I'm not squeamish, but my internal organs are.

"I wonder how they do this," I asked between swallows.

"I never saw the actual process," Burbank said. "That's why I'm here, because I never got too curious. I know they boil water in these pots made by the medicine men, and that they use hot sand and hot stones for two days. The stones are used for ironing the skin to get it leathery and smooth. Don't interrupt. I'm not through. Just keep on swallowing. You'll be all right in a few minutes. Well, I pretended I couldn't find the right kind of clay to make my water pots for the ceremony and I hunted high and low. Being a medicine man not even the chief could ask me questions."

"However, if you try to escape and don't make a go of it, your head gets shrunk, medicine man or no medicine man. I saw plenty of heads being used by the kids as playthings and many were sold on the outside to collectors. It didn't seem a glorious end for a man of my talents, so I planned wisely and with caution. I made a magic belt of about ten pounds of gold as a charm against bad spirits. Gold is worth about $250 a pound. Figure it out. I would need money when I got out, but, fighting jungle, even without a load to carry, is a man's job. You can't understand what it is like. Ten days swimming and wading and crawling through undergrowth and the pores of the sky wide open as the poets say. Day and night a steady pour of rain. That's two kinds of pores or pours. It took a month to get to Borja on the headwaters of the Amazon where I put on dry clothes for the first time since I escaped my captors. It took another two months to get to Para, where I boarded a steamer for New York to get a few days of peace and quiet and rest."

"But your palm grove! You can't drop it after thirty years of work," I admonished.

"I'm going back shortly," he replied. "You see, I know those head-hunters. They are a determined lot even if they lack physical courage. Right now those Redskins are scouting around my grove looking for me, thinking I would go back to my native haunts. Well, I must go back prepared—guns, equipment, etc. Put the thing on a business basis. Funny you came in when you did. You see, I am working out a plan. I am organizing a stock company—just a few of my friends. I got the stock certificates from the engravers not more than an hour ago. That's what's so strange about your coming in. Now, Paul, my friends get in on the ground floor. Dollar a share is all I'm charging for this stock—preferred. They will soon be worth a lot more you can see that. Soon as this gets about they'll soar skyhigh. I'll let you be the first in—fifty shares—a small block—for say——"

"I'll not only be the first in but the first out, Houdini. Goodbye," I shouted from near the elevator.

"Well, I didn't expect you to see the point, being a hotel reporter," echoed through the corridor.

"Going down."

THE END

Children of the Great Magma

By Walter Kateley

THE author gives us a picture of a wonderful oasis sunk into the Antarctic regions. The impression which the hero of the story produced upon the inhabitants of the oasis is described along with his adventures there, which toward the end increase in excitement and peril, until his own people rescue him from the abyss, for the oasis was the floor of a great depression far below the level of ice.

Illustrated by MOREY

BOGARDUS drew a large and most wicked-looking blue automatic from his pocket.

Very deliberately and most menacingly, I thought, he removed his furlined glove and inserted his hand through a leather loop attached to the butt of the weapon.

All this was a great surprise to me; for I had no idea that the man even possessed a gun, much lass that he would be bringing such an obviously deadly weapon on this trip.

I was cold; wretchedly cold. My hands and feet were numb, and my limbs were so cramped and stiff that I hated the thought of ever having to move them.

For several hours—it seemed like several ages—I had sat in the observer's seat of the exploring plane with my camera in readiness, watching for anything of interest in the vast expanse of snow and ice that could be deemed worthy of being photographed.

Nothing had appeared.

Only the great expanse of the surrounding vastness had stretched away on every side as far as the eyes could reach.

The world beneath us was white; all white.

There were indeed some variations in the intensity of the whiteness; as for instance where the ragged ice fragments of some upheaved pressure ridge cast a slight shadow, or some wisp of cloud draped its prototype swiftly over the glaring wastes.

There were no dust streaks; for we were over the permanent snowcap of the South Polar regions, and all things terrestrial were buried under an age long accumulation of several thousand feet of snow and ice.

As one does not photograph encircling vastness, I had been idle and miserable from cold—our thermometer showed twenty-two below zero—and my thoughts had become sluggish from the cold.

The Strange Actions of the Pilot of the Plane

AT the sight of my pilot's unsuspected weapon, all was changed in a twinkling.

My discomforts were forgotten, and my thoughts were instantly alert.

Since the observer's seat was directly back of the pilot's, some of his actions were hidden from me; but glancing up at the small mirror above and in front of him, I saw the reflection of his face.

He was wearing an expression I had never seen on his features before—half cunning, half stern resolution.

His eyes were fixed squarely upon my reflection in the mirror with an intensity that seemed to permeate my whole flesh and search my very thoughts.

I experienced a moment of dumb terror as I realized that the man had gone mad!

I fancy my reactions were not unlike those of a frog or tiny bird when confronted by the hypnotizing and paralyzing gaze of a huge serpent.

For a long moment I only returned his look. Then, becoming conscious that his hands were doing something of significance, I summoned sufficient resolution to shift my gaze and followed his motions as he thrust his right hand—from the wrist of which now dangled the revolver—into his side pocket and brought forth a folded scrap of paper.

Half turning in his seat he thrust the missive at me. I took it mechanically.

Neither of us spoke. Indeed, speech would have

You can imagine my relief when I saw a pair of rings on the ends of a doubled rope descend before my very eyes. I made a spring and grasped one of them just as one of my assailants came scrambling up from somewhere in back of my protecting rock.

been useless because of the all permeating roar of the powerful engine and the speeding propeller.

Dropping one glove, I proceeded to open and read this strange missive.

"Keep both your hands always in sight, and do not make any false moves, or I will shoot. Only in case you obey orders implicitly and make no attempt to oppose my wishes will I refrain from killing you. In other words, if the interests of science seem to demand that your life be sacrificed, I shall not hesitate to do my duty, so govern yourself accordingly.

"We are going to find the remains of the lost Garden of Eden, which I am convinced are somewhere beyond the region that we are now traversing. I have brought you, because I knew the director would not allow one man to make an expedition alone. Besides, I may need help.

"I consider you the instrument that a divine Providence has placed in my hands with which to further the interests of science.

"I have secreted a number of cans of fuel in and behind the lunch basket, and in your film box. You will now take one of those cans and empty it into the gas tank. Then you will watch the indicator, and as often as necessary replenish the supply.

"Mind that you do nothing more. I will do the rest."

While my amazed eyes were reading the written words, my mind took fleeting excursions back over the events of the previous winter.

In order that the reader may the better understand my thoughts and the peculiar situation in which I now found myself, I must describe to some extent the preceding events.

In the first place, my present companion and myself were members of the Gordon Expedition; sent out in May of the previous year by a number of scientific and educational institutions working in cooperation, for the purpose of securing first-hand information regarding various aspects of the Antarctic regions.

Our expedition had hoped to ascertain the approximate depth of the thickest part of the polar snow cap—how the compass needle and other sensitive instruments behaved in various localities—how magnetic currents behaved,—in fact all the scientific data obtainable in that vast field of adventure, where the English explorer Scott braved every hardship to reach the pole, and died heroically shortly after gaining his goal; where the now martyred Amundsen subordinated all to the cause of science, even to eating his dog teams, in order to reach and successfully explore the bottom of the earth. This land where the invincible Commander Byrd—now Rear-Admiral Byrd—spent months snatching a mere fragment from the obscurity of the unknown into the light of the known.

We hoped to unlock a little more of the frozen fastness of the South, which hitherto had yielded but an infinitesimal portion of its domain to the inquisitive eye of man.

Our Party in Its Camp and Its Outfit

WITH three exploring planes and a shipload of provisions and paraphernalia, a dozen of us, after a short season of flights and research work, had settled down in a hastily improvised camp to resist the rigors of a long antarctic winter.

We were quite liberally supplied with foodstuffs, warm clothing and similar creature comforts; and from a viewpoint of physical well being we found that we were doing not at all badly, considering the severity of the climate.

But from a psychological point of view the situation had its drawbacks.

Even before the arrival of darkness at the beginning of winter we found ourselves becoming more or less morose and uncongenial, and even suspicious of one another.

No doubt this was largely due to our long hours of idleness, for the want of any interesting occupation, and to the very depressing prospect of our landscape —shall I coin a word and call it our snowscape?—for there was most emphatically no land in sight. As a matter of fact we were as yet unable to ascertain whether we were above what in warmer ages had been land or sea; which was overwhelmingly depressing.

Outside of the buildings and tents of our little camp there was no object or vestige of color as far as the eye could reach only the unbroken stretch of virgin white.

This whiteness was not calm and peaceful and inspiring, like the surface of our fresh-fallen snow banks of temperate regions; but aggressive, forbidding, desolate whiteness, that chilled the marrow in a man's bones and made him feel himself an infinitesimal speck in the vast expanse of Nature's cruel and relentless domain.

We tried to maintain regular hours and a proper daily routine of our few duties—if indeed anything could be called daily that took place amid the only slightly luminous darkness, interspersed with scarcely discernible short periods of twilight which characterized the long winter night that now set in.

After each breakfast we devoted an hour or two to the work of polishing and caring for our equipment, taking observations and making records of such activities as the state of the weather rendered possible.

Then we read from our somewhat meagre and dog-eared supply of books, or played cards, or moped in silence; each according to his choice or passing whim.

The Buoyant Leader of a Dreary Party

OUR leader and director, Mr. Gordon, was a person of unusual buoyancy of spirit and versatility; and throughout the long winter he strove with increasing endeavor to interest us and keep up our spirits.

He instituted progressive games, parlor athletic stunts and such scientific experiments as our meagre equipment permitted.

Always after dinner he directed the conversation, which became desultory, into various interesting channels.

At such times he encouraged all the members of the party to express themselves freely on any subject they might have in mind and he so manoeuvred that those who were usually reticent were never submerged by those of a more talkative turn of mind.

At these talk-fests we discussed exhaustively politics, religion, economics, geology, witchcraft, sports and all the thousand and one things any of us were interested in.

"I am glad to see that you all talk very freely on these after dinner occasions," Mr. Gordon would often say, "for conversation is the very best tonic we could have at this time.

"There is nothing that makes for normalcy of spirit and intellectual equilibrium as does wholesome conversation."

Long before the end of that seemingly interminable winter night we commenced to realize what our leader meant by normalcy of spirit and intellectual equilibrium.

At these discussions we became acquainted with one another's hobbies and vagaries, as well as ambitions.

Among others who revealed somewhat striking mental attitudes was Pilot Bogardus. I speak especially of him, since he was destined to have a very great influence on my career.

His full name was George Henry Borgardus; but no one ever called him anything but Bogardus; he was one of those persons whose last name seems most fitting to their personality.

On one occasion the conversation drifted to Biblical matters; and here, to my surprise, I noticed that the usually reticent pilot seemed to be at home; on familiar ground, so to speak.

He discussed the changes of climate in the Holy Land; the geographical location of Bethlehem, Mount Sinai and other Biblical places.

He traced with interesting comments the probable course of the wanderings of the Children of Israel in the Wilderness.

At another time he discussed at some length, albeit with considerably less convincing detail, the probable whereabouts of the Garden of Eden.

"This episode in human affairs took place, I am convinced, much longer ago than most people think," he said. "I have given the matter considerable study and thought and I now feel sure that great changes, both geological and climatic, have taken place since that time.

"Although I feel that I am primarily a scientist, and that my sphere of usefulness must always be in the interests of Science," by now we had learned that the phrase "in the interests of Science" was a dominant one with him—"yet I have often felt a very pronounced leaning toward and interest in spiritual things.

"I have long paid special attention to matters of religion; studying the precepts and history of the Christion religion, for purposes of spiritual uplift and with the hope of salvation; and other religions in order to understand the vagaries and misconstructions of unenlightened superstition.

"I believe profoundly in a religion that is based on revelation"—he went on—"special and personal revelation, if you will, of the purposes and will of the Deity.

"I think I might even venture to say that I have sometimes experienced something akin to revelation!

"But I suppose I am straying from the subject; this matter having nothing to do with the location of the Garden of Eden. As I was saying, great changes have taken place. The inclination of the earth's axis has probably changed. Certain it is that astronomers have ascertained that the star that was once our pole star is such no longer; and that our present so-called North Star will shortly give place to another.

"Tropical vegetation formerly grew very near the Poles. You all know how in far northern Spitzbergen fossilized 'remains of tropical growths are very abundant.'

"I have no doubt that where we are now located there were once palm trees and tropical orchids."

The Garden of Eden's Location

"MY observations, and—and—other things—have led me to believe that the Garden of Eden was located, not as is popularly believed, in Central Asia, but somewhere beneath this vast antarctic snowcap. And I believe that one day it will be discovered."

At this point he broke off rather suddenly, with the air of a man who has suddenly become conscious that he has said too much. And although we pestered him with questions he declined to commit himself further.

Presently the conversation turned to other topics.

"I wonder if Bogardus can be slipping," said my table neighbor confidentially.

"Oh, I hardly think so," I replied. "He has always seemed to me a rather hardheaded and practical chap. I suppose we all have some eccentricities of superstition or religion or whatever you want to call it, if only we were disposed to talk about them."

As time went on, however, indications became increasingly numerous that, if not Bogardus, at least some of the others of our circle were, as my neighbor had said, "slipping."

A few became moody and morose, and failed to take much interest in daily affairs.

Mr. Gordon began to emphasize more and more the importance of lively conversation and physical activity as a means of keeping the mental reactions normal.

We found ourselves watching our associates for any signs of mental derangement; and consciously guarding our own actions and speech, lest we might do or say something that might appear "queer."

Then, as the dates of the calendar commenced to give us hope that the winter of our discontent was so

nearly over that all were going to pull through, one of our mechanics, a tall slim young man from one of the Middle States, lost his grip on sanity and became rampant.

We were on the point of retiring to our sleeping-bags when this young man—Jordan by name—broke into a tirade of profanity and swore vengeance on all present. He seized a rifle—the only one in camp—and endeavored to shoot those about him. Fortunately the gun was not loaded, and the man was disarmed before he could do any damage.

He fought furiously, however, and when he was about to be overpowered he broke away and rushed out of doors. He was clad only in his underwear and woolen socks.

A terrific blizzard was raging, and the darkness was very intense.

Several of us hastily donned coats and rushed out after him. We were too late. He had disappeared into the Stygian blackness, into which we dared not venture beyond the short distance penetrated by the lights from our shack, except with the aid of a line or rope, lest we should lose our way.

We displayed lights and shouted, but to no avail. There was no answer but the howl of the blizzard.

A Victim of the Blizzard

WE were forced to give up hope. When the storm and darkness had abated somewhat, twenty-four hours later, a venturesome search party found him a short distance from the camp, frozen to death in the snow.

Needless to say we were much saddened and not a little frightened by this tragic affair; and we lived in constant dread of a repetition of the occurrence.

But all times come to an end, and so did this one. Presently the increasing light heralded the approach of the sun to the horizon, and our spirits rose accordingly.

At length the long absent sun appeared; and we all set to work with a will to do the tasks that had been planned and then beat a hasty retreat.

Among the most industrious and enthusiastic was Bogardus.

He was a man of large, long, barrel-like body and short stocky legs; such as tradition has it should be endowed with great strength and endurance.

No job was too difficult or too tiring for him. During our preparations for observation flights he worked unceasingly, paying scrupulous attention to all details of overhauling his machine, and placing everything in readiness for action.

In fact, I was quite satisfied to fly with him as pilot when I was detailed to explore and photograph a somewhat distant region not before visited.

I embarked with considerable confidence in his ability and efficiency.

I come back now to the situation that confronted me.

As I read the note, I recalled the man's former conduct, and was at once convinced that he had been mentally unbalanced, or at least on the verge of insanity for some time. Obviously this note had been premeditated and planned some time in advance; for the note must have been written and all other preparations made before we set out.

As it was now, my life depended on the whim of a madman.

I at once decided that the best policy would be to seemingly acquiesce to his demands and await developments.

I fished a stub of pencil out of my pocket and wrote on the back of the note.

"How far away do you believe the Garden to be?"

I folded this and handed it back to him. But evidently he was not interested in what I had written; for he tossed the paper up and allowed the wind to carry it away.

I looked in my film case. All of the films except a few had been removed and a tin container of gasoline substituted.

This I emptied into the fuel tank, which I now saw to my surprise was much over half emptied.

As I poured in the last drops, I realized that even if my companion should now relent and turn back, we would not have enough fuel to carry us to camp. I threw the empty tin overboard; then for some time I sat still, trying to bring myself to the realization that these things which seemed almost impossible were true, and trying to decide on a course of action.

The Insane Pilot and the Fuel and Food Question

I CONSIDERED the chances of success were I to leap upon Bogardus and attempt to pin his arms down to his sides, and ultimately overpower and disarm him.

But I reflected that he was a larger and enormously stronger man than I; and since maniacs are often endowed with superhuman strength, I should probably be no match for him, and could hardly hope to prevent his firing the gun. And then at best such a course would leave the plane without an operator, which in itself would lead to disaster.

Then I thought of striking him over the head with a can of gas; but this too seemed unfeasible, since even if I should be able to stun him or kill him outright and wrest the controls from him, I had had but little experience in handling a plane and would probably only wreck it.

There seemed to be nothing to do but wait. I next examined the lunch basket. To my great surprise I found that all the lunch except a few small sandwiches had been removed and two-gallon cans of gas substituted.

This was indeed a fiendish trick.

What were we to do now for food when we became hungry? We had only the meagre one-day emergency rations which our safety code demanded that

we keep always about our persons when away from camp, and these few sandwiches.

A Ruse to Save Fuel

I TOOK out one of the cans and obediently proceeded to empty its contents into the tank. As I did so I bethought myself of the strategy of emptying only a part and secreting the rest. At any rate this would shorten the time of suspense, and bring us to earth at least a little nearer to our base of supplies.

As if, I thought ruefully, a few miles could be of any consequence in this vast expanse, when we were more than twice the safe flying radius from camp. What hope could there be, even if we did land safely and manage to survive, of our ever being found and rescued, or of making our own way back to headquarters?

Nevertheless, I decided to act on this hunch—and after pouring perhaps a little over half of the fluid I replaced the cap on the tank and dropped the can carelessly into the basket.

Evidently the ruse was not detected, for nothing happened.

As the tank gauge continued to sink, I dislodged six or seven more cans of fuel and emptied a part of each into the spacious maw.

At length there were no more cans; and I settled down to await the time when the tank should be empty, and our flight automatically arrested.

Bogardus sat grimly at his task of navigation; and I saw his eyes constantly searched the surroundings for some signs of his fancied "Garden."

Needless to say, none appeared.

Although I was hungry and miserably cold, I gave these discomforts but a passing thought. But the uncertainty of my fate and the dreadful suspense of waiting for the tank to run dry drove me almost to distraction.

At length the gauge settled to the very bottom, and with a few despairing chugs the engine ceased to roar.

We were, I judged, nearly two thousand feet in the air.

Bogardus grimly turned her nose a little to earthward and allowed the plane to glide at only a slight angle.

Slowly but surely we descended; and I looked anxiously ahead of us to see on what sort of terrain we were to be forced down.

To my consternation I saw a large field of rough and broken ice.

Over this we sailed for a long distance, and then away to the right I saw a little tract of what appeared to be level snow.

Evidently Bogardus saw it at the same moment; for he changed our course abruptly and made directly for the open space.

We arrived above it, still at an altitude of two or three hundred feet.

The pilot circled about in a wide spiral, and finally settled down. I could not but admire the dexterity and skill of the madman.

Evidently his mental derangement had in no way impaired his nerve.

The Forced Landing

BUT just as we were about to make the landing, a boisterous puff of wind almost upset us, and carried us away to the edge of the chosen landing field, where before coming to a standstill we collided with broken ice and tore one wing off the machine, besides doing other damage.

Bogardus rose and stretched himself, regarding me menacingly.

"I shall have to continue on foot," he said. "But first I will eat a bit of lunch. You will make a bundle of our blankets and water flask. Then we will be off. Give me the sandwiches."

I hastened to obey. I handed him the little packet of sandwiches, and set about rolling up the blankets and water flask.

"I will have a sandwich, too," I said as I finished. "No you won't," he said. "I shall need them all for myself. I must conserve my own strength in the interests of Science. I may have quite a long way to go yet. If you are obliged to drop out, it is no matter. I will let you carry the stuff as 'you go.'"

I was appalled and enraged at this coldblooded remark, and was tempted to assail him; to fight it out, then and there.

Realizing that such an attempt would be only foolhardy, I turned bitterly away.

He had detached the automatic from his wrist and laid it down on a block of ice beside him.

"Shall we take the tool case?" I asked innocently, and picked up a little roll of wrenches and first aid tools.

"No," he said gruffly, "put them down."

For response, I gave them a backhand swing and hurled them at the gun.

My aim proved to be good. I struck the mark fairly. The gun flew from the block of ice and went hurtling and careening across the smooth icy surface of the snow.

With a volley of profanity the maniac sprang to his feet and gave chase.

I must do my stuff now or never, I thought; and unslinging my binoculars from my shoulder, I too took up the chase.

The Flight with the Mad Pilot and Its Denouement

MY longer legs and less weight gave me an advantage, and I quickly overhauled him. As I came up behind him, I gave my binocular case a long swing by its straps, and struck him with all my might between the shoulders.

Such a blow should have felled any man; but from him it only evoked a deep grunt, as he wheeled and

grabbed me by the arm. His grasp was like a vise, and nearly paralyzed me.

But I was in no mood now to give up the fight. I collected my strength for one supreme effort, and threw my weight against him; at the same time lashing my ungainly weapon about his legs. Together we toppled over and fell on the hard snow.

I thought myself fortunate in being uppermost; and I lost no time in taking advantage of my position.

My adversary was face downward; so I thrust one arm under one of his and the other about his neck and clasped my hands underneath him.

This was a hold such as wrestling experience had taught me no common strength or ingenuity was likely to break.

"So that is your little game," said Bogardus calmly!

"I ought to wring your contemptible neck for this, but I won't; I must conserve my strength in the interests of Science. So I will get the gun, and dispatch you in a gentlemanly way."

With that he struggled to his feet, shaking and throwing me off with such a terrific display of strength that I was rendered helpless and dumbfounded.

He only hesitated to give me one cuff that sent me reeling; after which he went deliberately and picked up the gun.

My impulse was to take to my heels and run away. But even if I were to escape his bullets, where was I to run to? It seemed only suicidal.

The maniac opened the chamber of the weapon to make sure that it was properly loaded; then closing it with a snap, raised it to fire. He was scarcely twenty yards from me.

At that moment the air was rent by the sound of a terrific crash.

The Disappearance of the Pilot in a Crevasse

I FELT the ice vibrate beneath my feet. I saw the smoke leap forth from the muzzle, as Bogardus, gun and all dropped out of sight!

The sharp crash died away to a rumble, and rolled away in the distance as the sound of deep cracking ice always seems to do.

It all happened so suddenly and unexpectedly that I could scarcely believe my own eyes and ears. Yet I knew well what had happened.

One of those great crevasses, miles long, which the explorer so often sees in hard snow and ice had suddenly split the years of accumulation on which we had stood. And it had so happened that the madman had been standing directly over the path of its progress, and had been swallowed up.

I had often heard these deafening and terrifying crashes, seemingly near at hand, in the Great Lakes in the North, and later during my exploring adventures. But never before had I witnessed the actual opening of a crevasse.

I had always thought of the huge cracks as occurring a long distance away from where any person happened to be; but I knew now that like lightning or earthquakes they were no respecters of persons.

When I had collected my thoughts, I hurried to the spot where my adversary had disappeared, thinking that the crack might not be very large, and that he might be held fast near the surface; although what I would do with him in such a case, I had no notion. Obviously I would not dare to assist him to safety.

However, I was spared any such dilemma. It proved to be quite a large crevasse; seven or eight feet wide at the top. A few yards down it angled slightly away to one side, producing an overhanging wall that cut off the view. Surely in such a vast and deep crevasse there could be no hope of a man's surviving.

"And so have the mighty fallen," I said to myself as I turned away.

A Hopeless Prospect

BUT although Fate had been on my side during the fight, the outlook was far from cheering as I looked about me at the wrecked airplane and the unending environment of snow and ice.

I walked back to the machine. There were the sandwiches that Bogardus had so hastily left, fast freezing in the cold wind.

A few flakes of snow came driving in; and looking away to windward I could see that a storm was on its way.

Obviously the only thing to do was to improvise some shelter under which to weather the storm.

I hastily knocked loose some pieces of broken ice and stacked them up on the leeward side of the wreck. Then I disentangled the broken wing and put it over the top for a roof.

Now at least I had some protection from the wind. I felt the engine. It was still warm.

It dawned upon me that since I still had a small supply of gas, I might as well keep the engine warm, at least for a while.

I emptied all but one of the cans into the tank, and after some delay succeeded in starting the engine.

By this time the storm was raging full blast and it was growing darker.

I adjusted the feed to make the engine run as slowly as possible, in order to conserve fuel, and wrapping the blankets about me, sat down.

I thawed one of the two remaining sandwiches on the engine and ate it.

It was a gloomy repast. Although I huddled close to the engine, I was still cold. However, the fast falling snow soon drifted over my roof and around the machine, shutting out the storm and bringing a little comfort.

At length I tried to compose myself to sleep. I was very tired. Wrapping myself in one blanket and drawing the other over me, I lay down as close as I could get to the motor and soon was lost to my world of trouble.

After the Sleep

I MUST have slept a very long time. When I awoke the engine was still and cold. I was also cold, and stiff.

Breaking a hole in the snowdrift, I saw that the day was clear and bright, no trace of the storm being left except fresh drifts.

I decided to strike out at once and make an attempt to reach safety. It was indeed a forlorn hope, but obviously there was no advantage in staying here to starve.

With the last part can of gas I warmed up the engine and with it my last sandwich and the water flask.

After my meagre repast I wound my watch, made sure that my pocket compass was in its place, rolled up my blankets and flask and prepared to abandon the old plane to its fate.

As a last thought I decided to don my emergency parachute which I had laid aside during the night, thinking that I might have use for it as a shelter from the wind and snow at night.

I did not linger a moment after my kit was prepared, for fear lest my courage might ooze out and I should be tempted to remain where I was to die miserably, like a rat in a trap.

I had decided to travel in the same direction in which we had been headed; knowing full well that there was nothing of consequence behind, and hoping for better luck ahead.

The wind was still cold; but the snow was packed hard and the going was good.

For several hours I trudged resolutely forward, seeing nothing but here and there a ridge of broken chunks of snow and ice where some pressure ridge zigzagged across the plains.

At length I arrived at a ridge somewhat higher than the others in its vicinity and I decided to rest a few minutes and try what could be seen through the glass.

On picking up my binoculars after the fight, I had found one side broken; so I had taken out the one uninjured barrel and put it in my pocket, leaving the rest by the airplane. Now as I swept the horizon almost hopelessly I saw a tiny white cloud low in the distance. It was only a speck; but it was so white it reminded me of a steam cloud often seen above a steam locomotive.

This was away to the right of the direction in which I had been traveling; but I determined at once to turn from my course and journey in that direction. After all, one direction was as good as another in that vast waste.

Hour after hour I traveled, but seemingly I got no nearer. At times the cloud faded and almost disappeared; at others it appeared very distinctly.

I could not understand why the distance still seemed so far. I knew I must have traveled a great many miles.

At length, tired and hungry, I decided that I would have to give up the chase for the day. So I took careful observations with my pocket compass, in order to locate the exact direction of the cloud, and prepared to make camp.

The End of the Day's Journey

I STILL had my one day's rations in my emergency kit, and a little water in the flask which I had carried all day under my clothing to keep it from freezing.

I found where an upheaved block of ice overhung a slightly sheltered spot. This I barricaded with a few chunks of snow and in the enclosure thus afforded ate my bit of condensed food. It was not bulky enough to appease my appetite, but I felt that it would give me strength for the following day. Wrapping my blankets about me I lay down in the snow to try to sleep. I was troubled with misgivings lest I might freeze to death and never waken.

I wondered dimly for how many thousands of years my body would remain here in the snow like the bodies of mammoths that have been in perpetual cold storage in arctic regions since prehistoric time. But I did sleep, brokenly, and miserably, in spite of the cold; and got up to find that the sky was overcast and all was dull.

The limit of visibility seemed to be only a mile or two away.

I hastily and shiveringly gathered up my blankets, threw away my empty water flask and made off in the direction where my compass told me the elusive cloud ought to be.

By this time I had decided that there might be a hot spring beneath the cloud; the cloud being formed by the vapor arising from the spring. I had read of there being hot springs in some quite frigid countries.

As I struggled on hour after hour my strength began to fail me and I had difficulty in thinking connectedly.

Occasionally I would wake to the realization—or at least to the impression—that I had not been thinking at all for some time. This was very disconcerting and even alarming. I knew that people in deserts or lost in the wilderness continued to wander on, long after their minds had ceased to function.

I thought of the fate of the young explorer at camp who had lost his mind, and of Bogardus; and I strove desperately to preserve some train of consecutive thought.

I set myself to repeat aloud whole poems dug up from my memory of schoolboy days, and found this reassuring.

My feet and legs became numb; whether from cold or weariness I was unable to determine. I stumbled whenever I encountered rough going.

Strange Thoughts and Dreaming

TRY as I would, I could not keep my thoughts from going back to that tragic moment when Bogardus raised his gun to fire at me. Could it be, I wondered dimly, that he had indeed fired with accurate aim,

killing me instantly, and that the great crash I had heard was the bullet entering my brain; that all subsequent happenings had been merely a dream. Was Death then only a sleep and a dreaming; and would my dead self go on dreaming through all eternity?

Then again I thought it might be that the great noise I had heard was only the death rattle in my own throat, as my life was expiring.

I tried to recall if I had ever read any authoritative statement as to whether a dying person was able to hear this strange phenomenon.

After such a morbid period my thoughts would revert to normal, and I would wonder at my own hallucinations.

At times I reflected that since scientists believe that thinking is largely but a chemical reaction, and since heat is one of the essentials of most chemical operations, it might be that the intense cold now penetrating to my brain was obstructing the reactions and causing periods of lapse of thought.

Looking at my watch, I found that I had been steadily on the way for over twelve hours.

Should I try to struggle on a while, or should I stop and rest?

I feared that if I paused to rest I might never be able to start on again.

However I decided to take a chance; for it could make little difference as to the exact time and place of the end. It seemed that by now, if ever, I should have arrived beneath the cloud.

Perhaps I had passed under it and gone on. I threw my blankets down on a little ledge of ice and sat down.

After a moment I noticed that away in the distance the sun was breaking through the clouds. A few minutes later the whole sky cleared rapidly, and I saw my long sought white cloud; now greatly enlarged and apparently only a couple of miles away.

I sprang to my feet and hurried on. I was greatly excited. I felt the hot blood surging up through my neck and flooding my brain. I was no longer cold, and I perceived that I no longer stumbled.

I broke into a run, and went scurrying over the frozen ice and snow with little effort.

It occurred to me that I had forgotten to pick up my blankets, but it was little matter. I would not turn back now. Here was possible deliverance.

Or was it only a mirage, and I only a poor, demented wanderer, chasing it with my last bit of strength?

The White Cloud Not a Mirage

NO. It could be no mirage; for I was drawing perceptibly closer to it; and now as I slowed up a little to get my breath, I saw that numerous small billows of vapor were forming not far above the ground and rising slowly to merge with the main cloud.

I continued to hurry on; but the distance proved greater than it had appeared, and after a while when the first excitement of renewed hope commenced to wear off, I felt more tired than ever. Several times I stumbled and fell to my knees, but I was not to be daunted now by mere fatigue and weakness. Always I regained my feet and pressed on.

Then of a sudden the wind veered slightly, and my nostrils were greeted by a breath of warm air; faint but unmistakable, like the first stir of a Canadian Chinook wind!

It was indeed a joyful feeling; and my aching legs and weary feet responded once more to my increased urgings.

Of the rest of the journey I remember nothing, until the moment when I came to a halt on the brink of a great chasm.

The sight that there met my eyes I never shall forget.

An Oasis of Green Verdure in the Antarctic

FROM the brink of a crag of ice I look down—down—as though to the very bowels of the earth; and there, at least two or three thousand feet below me, was a beautiful green landscape!

There were little fields and gardens with fences between; and perhaps half a mile away I saw a column of black smoke rolling up.

The exotic breath of fruit tree blossoms assailed my nostrils, while the faint barking of a dog came from somewhere in the distance.

My first thought was to seek out some place where I could scramble down into the great depths; for surely there was warmth and human beings.

I ran a little way along the cliff top, but all seemed to be sheer precipice.

It was then that I thought of using my emergency parachute, which I still carried on my back, not having had occasion to use it for shelter.

I took it off and examined it to make sure it was undamaged and in working order. Apparently it was in proper condition.

I buckled it on again and took the trip string in my hand.

I was determined to make the plunge, regardless of who or what was down below. I had seen enough to assure me that it was preferable to my present situation.

Drawing back a little way from the cliff edge, I made a quick run; and as I approached the brink, gathered all my strength for a broad jump. As I took off I jerked the line to the parachute.

There was a moment of breathless suspense as the force of my spring died out in a long curve and I hurtled downward; not knowing whether or not some jutting crag might dash me to pieces.

Then my parachute opened, and I found myself sailing easily and silently earthward.

Upon reaching the ground, I was surprised to find myself in a little patch of flourishing corn. I had sailed away from the ice cliff perhaps a hundred yards.

The corn was so high that I could not see over it, and I was too exhausted to think of going any further. So I broke off a few stalks of corn and threw them down for a bed.

The Landing

AS I flopped down I noticed that the ground was warm, quite unnaturally warm; and looking about I saw in the ground a small grating made of willow withes, almost beside me. It reminded me of the intake to a storm sewer.

Holding out my hand I found that warm air was issuing from it.

"These people must be farming and raising crops by the use of artificial heat," I thought; but upon fuller reflection this seemed impossible.

I wondered if any one had seen my descent, and what they would think if they found me asleep in their corn patch. Were they Eskimos, or South Sea Islanders? And so wondering I promptly went to sleep.

When I awoke I was not cold and stiff as usual, but still comfortably warm. I was, however, very hungry and thirsty.

Going over to the ice cliff, I found a little trickle of clear water running away.

Here I drank copiously and washed my badly chapped hands and face.

Then I looked about for something to eat. Near by there were vegetables growing; some kind of turnips, I took them to be. I pulled a few out of the soft soil and ate them. They were very good.

I looked anxiously around for human beings, but could see none. This was very strange; for the ground seemed to be very thoroughly tilled and the crops were well cared for. I could see no signs of houses or other habitation.

But now I commenced to hear sounds in the distance; and presently the rhythmic beating of some kind of drum.

Immediately I set out to investigate; cutting across the small fields, I soon came to a path leading in the direction whence the sounds came.

Now the path was joined by others; and it assumed the appearance and proportions of an improved highway.

And at last I saw a person walking some distance ahead of me.

I quickened my pace in order to come up with him.

As I drew closer, I decided that it was a man. He was dressed in a garment that from a distance seemed to be but a single piece of cloth, wrapped tightly about his body and falling in a loose fold about his thighs.

His arms and lower legs were bare; but his feet were protected by some sort of low shoes.

He walked with an easy and elastic stride, and although small of stature appeared to be of athletic build.

I shouted to him to wait for me. He turned about as if alarmed at some strange sound.

For a moment he stood still and regarded me with blank amazement as I continued to advance.

One of the Inhabitants

THEN seized by panic he turned and fled. Running a little way down the road, he suddenly swerved to one side and bolted into the fields. He ran with great swiftness, and soon was lost to sight.

So this was the kind of people I had to deal with! Well, anyway, I could be thankful that they were not gigantic, fierce or aggressive.

By this time I was becoming uncomfortably warm, because of my thick and heavy clothing; but I hesitated to throw away any of it, since I knew not what vicissitudes I was about to encounter.

Soon the drum ceased to beat, and I heard human voices shouting in unison.

"There must be some kind of a celebration going on," I decided. This accounted for all the fields being deserted.

I rounded a little grove of high bushes and came upon a large crowd of people.

They were grouped about some large boulders that seemed to be at the very edge of a cliff.

Some important ceremony was evidently in progress. On top of the highest stone, seated on an elaborate, throne-like structure, was a person of great dignity. He was clad in multicolored robes and crowned with a glittering head-dress.

Mounted on a slightly lower stone were three men, seemingly the conductors of the ceremony, who were also dressed in elaborate costumes.

They seemed to be doing something with some kind of an animal; not exactly a sheep, but still resembling one.

The Assembly and the Sacrifice

THEY all had their backs turned toward me, and all were silent.

I stood perfectly still, loath to interrupt such a proceeding and unable to guess what kind of reception I should receive.

Gradually it dawned upon me that this was a religious ceremony, and that these people were offering up an annual sacrifice to their deity.

All eyes were turned on the group of three figures. No doubt they were priests. They moved slowly and methodically.

Two of them placed the frightened animal on its back and grasped it firmly by the four legs.

The third produced a large, crudely fashioned knife and held it aloft.

He spoke a few words in a loud voice, and the audience made response with a brief phrase, none of which I was able to understand.

Then with a wide flourish and a quick long stroke, he slit the abdomen of the prostrate animal and dropping the knife thrust his hand deep into the incision. With a jerk he drew forth the heart of the beast. With a grandiloquent gesture he held it high above his head, the blood dripping profusely.

A great shout went up from the spectators. Instantly I recalled accounts of such scenes depicted by historians writing of the customs of the ancient American races, of Incas, Mayas and Aztecs; and now it

occurred to me that these people were of about the same size and build as those early Americans, although lacking their copper color. I imagined their lighter color—they were as light as Caucasians—might be due to their living for many generations under a vapor cloud.

The officiating priest now approached the higher stone, on which sat the great man—the King, I surmised.

This dignitary rose, and leaning over received the bloody trophy from the priest and with a ceremonious gesture threw it over the edge of the cliff.

For a long moment he stood with his hand upraised. No one moved or spoke.

And now I noticed for the first time that the edge of the bluff curved round in a circular form, revealing a sheer precipice on the opposite side. In fact it was not a bluff in the ordinary sense of the word, but a vast hole in the ground, perhaps a thousand or fifteen hundred feet across. It was into this great hole that the heart of the sacrificial animal had been hurled.

At that moment someone in the ranks nearest me must have turned and seen me, for I heard a gasp of amazement and almost instantly everyone turned as with one accord and looked at me!

The three priests turned from their expiring victim to stare.

The ruler himself, his right hand still upraised, directed his attention toward me.

A long drawn out exclamation of wonder went up from the great crowd, but all stood still.

No doubt I was a strange sight as I stood there clad in my heavy aviator's clothes, bearing no resemblance to their garments, and with my features, stature and build so different from their own.

For a moment I was at a loss to know what I should do, or whether it was up to me to do anything. Still, it seemed that some kind of greeting might not be inappropriate, so I saluted the crowd with a wave of the hand, and advanced toward the scene of the ceremonies.

The Seat of the Mighty

THE crowd parted to allow me to pass; and with such dignity as my disheveled garments allowed me to assume I approached the "seat of the mighty."

I mounted the stone where the three priests were officiating, and they quickly departed.

Here I hesitated, not knowing whether it would be proper or even safe to approach closer to the king—if king he really was.

I turned to look down into the great abyss. It seemed bottomless; filled at a great depth by impenetrable gloom.

I waited, wondering what would happen next. The chief dignitary appeared to rise to the occasion.

He waved his hand for silence—by this time the people had commenced to mill about and were shouting excitedly.

When order was restored he spoke a few words in an awed tone, and pointed to me with a most solemn gesture.

It occurred to me that he was telling them that I was an envoy from the deity they had gathered to propitiate, or perhaps that I was Deity himself.

I reasoned that such a delusion might make for my safety, and I resolved to make the most of it.

And now from the ruler's tone and gestures I judged he was giving his subjects instructions about something he wished to do.

As he spoke I noticed how much his features resembled those of the Incan rulers of old Peru.

I also became conscious of an intense heat emanating from the great chasm.

Glancing aloft I could see the great white cloud which had led me to this place, hovering far above us.

Heat coming from this hole, I concluded, must be the cause of the cloud and also the explanation of this green oasis in the midst of the great Antarctic snowcap.

The King having finished—I shortly learned that he was the ruler of the people, and that he was called the "Zail,"—came down from his high place and knelt before me.

His subjects also assumed the attitudes of extreme reverence.

I walked quickly around him, and waved my hands aloft over his head. I felt that a god or a god's envoy might be expected to do something of the sort.

When the king arose, I produced my glass from my pocket, looked through it and handed it to him with much ceremony.

By gestures I indicated that I wanted him to sight through it as I had done. He did so; and I perceived by the amazed expression on his face that distant objects were being brought surprisingly close to him.

He lowered the glass, examined it critically, and again surveyed the landscape.

Evidently he was much pleased with what he saw. At length he beckoned to one of the priests to mount the stone and approach us.

He was about to hand him the instrument when I protested. By vehement gestures I tried to convey the idea that this gift of the gods was designated for our eyes alone and that none else should use it. His Highness acquiesced, and the priest withdrew.

Presently came men with baskets, and offered me various kinds of fruits and other eatables.

Needless to say I accepted gratefully and lost no time in sampling their gifts.

Of my experiences of the next few days, time and space would fail me to relate all.

Suffice it to say that in due time I was conducted to the Zail's palace, which proved to be a suite of rooms excavated in the face of a soft sandstone cliff, and was entertained in royal fashion.

From there, under the guidance of His Highness or some of his immediate subordinates, I made numerous exploring trips to acquaint myself with this strange little world.

The Tiny Oasis

I FOUND that the tiny oasis was only about three or four miles in extent; of a roughly circular form, and that the larger part of it was intensively cultivated by the inhabitants, who appeared to be about seven or eight thousand in number. They apparently possessed no domestic animals or machinery of any description.

But how they came to be here, in the midst of this vast wilderness of snow and ice, I could only conjecture and I felt sure that they knew no more about the matter than I. They had no system of writing, and apparently no method of keeping records, aside from a very crude system of tying knots in colored strings.

This crude method was, I suspect, as old as their civilization—if their status could be called civilization—perhaps we had better call it a culture. For this method of keeping accounts was in vogue in very early times in Mongolia and other Asiatic countries, and was still used to some extent when the Spaniards conquered Peru and Mexico. The Peruvians called the knotted strings "quipos"; and while I believe these people knew nothing of the time or manner of their coming to the oasis, I am equally convinced that they knew nothing of the existence of any people besides themselves.

Had they known of the existence of other peoples, they would not have been so ready to accept me as a super-human being.

At first this superstition that I was from the domain of the gods seemed to assure my protection. Seemingly they worshipped two gods; Light, as exemplified by the sun, and Heat, the life-preserving energy that issued from the orifice in the earth. Hence they offered sacrifice on the day of the Summer solstice and threw the heart of the sacrificed victim to the spirit that dwelt in the earth.

I tried as best I could to preserve the thought; first, as I have related, by showing the ruler my field glass. Later I dislpayed my watch to him and some of his higher officers with quite striking effects.

But familiarity breeds contempt. Seeing me go about every day, acting not much unlike other people, soon dulled the edge of their wonder; and I came to realize that pressure was being brought to bear upon the Zail to resort to some test to prove my divinity.

Of course, not being able to understand their language I was unable to ascertain what the nature of this test was likely to be; and even had I known what they meant to do, it is probable that no act on my part could have warded off the dreadful hour.

Surely I could not have foreseen the strange and altogether spectacular nature of my deliverance; and probably if I had had the world at my command, I could not have staged an event more calculated to afford the people absolute proof, from their point of view, of my more than human qualities.

But I am getting ahead of my story, and must return to this episode in its proper time.

The Mystery of the Hole

NEEDLESS to say the vast hole in the ground and the heat emanating from it were a great mystery to me; and I lost no time in exploring its outward aspects.

It proved to be merely a large opening, such as might have been produced by the entry of a huge projectile; and I believe it was caused by one of Nature's projectiles, that is to say, a meteoric body. However, this could not have been an ordinary meteor, since even large meteors do not penetrate the earth to any great distance, and this one had obviously penetrated so deeply as to liberate the intense heat from the Great Magma; i. e., that great molten mass which scientists say constitutes the center of the earth.

Ordinary meteors, because their weight is not very great—being largely made up of rock or nickel-iron—and because the earth's atmosphere offers so much slowing-up resistance, seldom penetrate more than a few feet, or at most a few yards into the soil. (I believe the one known exception to the rule is at Canyon Diablo, Arizona, where a vast hole has been torn in the earth, three-quarters of a mile in width. Here more stone and earth débris has been heaved up around the crator's edge than was moved in building the Panama Canal. More meteor fragments have already been found about the locality than in all the rest of the world; and although shafts and borings have been sunk to a great depth, no trace of the main body of the meteor can be found.)

I imagine the meteor—if meteor it was—that produced the hole which I investigated, was made up of material many times—perhaps thousands of times—heavier than any materials now known to be on earth.

There is proof that some of the bodies in space are actually made up of such heavy material.

The theory is that the atoms of these weighty substances are not normal atoms, consisting of a very heavy nucleus of protons and electrons, surrounded by groups of widely separated electrons moving in large orbits about their centre; but that they are made up of only vestiges of atoms, so to speak.

It is supposed that these atoms consist of only the extremely heavy nuclei, from which the attendant electrons have been separated under the stress of great pressure, intense heat or other very abnormal conditions.

As proof of the existence of such bodies, let me quote from Willem J. Luyten's "Pageant of the Stars."

"The companion to Sirius . . . a very small body . . . we have ascertained . . . weighs almost as much as the sun. From the combination of its size and weight, we derive the density; and find the amazingly high figure of 27,000 times that of water! . . . One cubic inch of it weighs about half a ton; it is 1,500 times as heavy as gold."

Let us suppose that a natural projectile of similar material, of somewhat globular shape, about fifteen hundred feet in diameter, approached the earth moving

at the average speed of known celestial bodies. (Jacoby in his "Astronomy Handbook" says that 13 miles per second is the cosmic linear velocity of the solar system.)

If a cubic inch of this projectile weighed half a ton, its total weight in pounds would be so great that the whole of this page would hardly suffice to contain the zeros necessary to write it; and when it came within the field of the earth's attraction, the gravitational pull would be something altogether beyond human comprehension.

The rate of its flight now accelerated would have become so great that it would have penetrated the comparatively thin blanket of the earth's atmosphere almost instantaneously and plunged with lightning speed deep within the bowels of the earth.

PERHAPS it kept on sinking further and further into the Great Magma, until now it may be lodged at the center of its molten interior, where gravity is neutralized.

It so happened that at this point the exterior of the earth was composed of very firm materials; sandstone near the surface, underlaid with a thick stratum of granite—and all this prevented the sides of the crater from crumbling and caving in to fill the hole. (See footnote.)

A number of wide, deep cracks or crevasses radiated from the orifice and extended for some distance in several directions. It was the heat that found its way into these radiating cracks that the natives had succeeded in confining in rudely constructed conduits and distributing to their homes and fields.

This work had been accomplished with a seemingly tremendous amount of labor. Perhaps only the fact that they had been engaged in the project a great many centuries made it possible for them to have accomplished so much.

All but two of these radiating crevasses had been converted into heating systems at the time of my exploration; and a small army of men was even then working on one of them. I gathered that in all such jobs they followed a regular routine.

Commencing at the outer extremity of the crack, it was filled in with earth, refuse or any material at hand, until a point was reached where the crack became so deep that it refused to be closed with any reasonable amount of material.

Beginning at this point a bridge or roof was thrown across the crevasse, supported by slabs of slate, green poles or whatever building material was available at the moment. This roof they extended, slanting it gently downward toward the source of the heat until they reached the main orifice, or until the crack became too wide to admit of bridging by their primitive methods. From the high point of this bridge heat tunnels were built in all directions, slanting slightly upward. Apparently they had early learned that the tendency of hot air is to rise.

*It has been estimated by mining engineers that the internal heat of the earth increases approximately one degree centigrade to very 50 to 100 feet. At this rate it would require a depth of at least 7600 feet to produce a boiling temperature; a temperature which must have existed not far below the mouth of this orifice.

The Great Tunnels

THEIR heat tunnels were fashioned of stones laid up in lime mortar, somewhat after the style of our brick sewer tunnels in modern cities. These tunnels, after branching innumerable times, each time growing correspondingly smaller, finally came to end in gardens or in homes.

It was the terminus of such a tunnel that I had observed in the field, where I first made my parachute landing.

In the fields, extensive networks of small ducts, composed of stones without mortar were utilized. The small interstices in the masonry allowed the heat to seep out gradually and permeate the soil, thus vivifying it and in turn warming the overlying atmosphere.

The vent gratings allowed the last remnants of heat to escape, and assisted the circulation of air in the tunnels.

At the time of which I write this last project was very nearly completed; and the workmen were largely engaged in pressing the frontier of their domain a little way into the ice cliffs, to allow for enlarged fields.

This was no mean undertaking, owing to the fact that these cliffs were two or three thousand feet high. In fact they represented the entire depth of the age-old snow cap of the extreme Antarctic region.

First large caves were cut in the face of the snow bank, which had long since been relegated to solid ice by the pressure of millions of pounds from above.

Then by laying fires or applying hot water the soil was so thawed and loosened that trenches could be dug and the heat conduits led into the caves and connected with the feed tunnels; whereupon the escaping heat ascending gradually melted the ice above it until finally the cave disappeared and the wall once more became straight.

But after the ice had once been cleared away the task was by no means completed; because the constant tendency of the ice was to crowd out at the bottom, owing to the great weight above it; and this glacier-like movement was ever present.

So, if a constant supply of heat were not forthcoming to melt it, the frozen front soon advanced and covered the ground. Thus a constant attention and watchfulness was necessary to hold at bay the ever encroaching glacier, which flowed very slowly but relentlessly.

Only by means of innumerable drainage ditches was it possible to carry the snow water away from the outlying gardens sufficiently to render them productive.

I wondered how long it would be possible to continue the enlargement of the productive area to keep pace with the natural growth of the population.

Had this enlargement always kept up at such a pace, or had they had periodic shortages of production, resulting in famine and pestilence? Or had they perhaps

been driven to systematic limitation of population? If it was a case of limitation, had they had recourse to extensive human sacrifice or to birth control?

From an eugenic point of view the race seemed to be in a flourishing condition; for I saw no inferior specimens such as dwarfs or degenerates. And the race was manifestly now decadent; for all the available land seemed to be under intensive cultivation, and they were even now enlarging their domain.

There were, however, no indications that they were making any improvements in their equipment or methods of living. They had no metals—perhaps owing to their restricted territory none were available—and their tools, fashioned of stone and wood, were most primitive.

They possessed no domestic animals and no beasts of burden. They did indeed have a few animals; but these were restricted to a sort of game preserve or zoological garden, and were of no importance economically.

The Early History of the Oasis

DURING my few days' stay among these people. I spent much time trying to visualize with my mind's eye the early history of this strange little oasis in the desert of frozen wastes; a veritable world unto itself.

For a true perspective, we would no doubt have to go back many thousands of years. Let us say a hundred thousand years ago, which is almost modern times as compared to the long reaches in which animal life and even men have inhabited the earth. Practically the whole earth was covered with tropical growths of plant life. A great many land formations now sunk beneath the ocean constituted the home of hosts of prehistoric and strange beasts. Among these were the mammoth, the woolly rhinoceros, the more primitive horses, known to us as Equus giganteus; giant reindeer, possibly the saber-toothed tiger, and various other equally strange and fearsome animals. Then, of course, there were men; primitive, uncultured, yet to some extent gregarious human beings.

People of much the same appearance and racial characteristics may have inhabited large areas of what is now Eastern Asia, South America and vast portions of the earth's surface now lying at the bottom of the Pacific Ocean; also much of the areas now covered by the Arctic and Antarctic snowcaps; snowcaps that are only the slowly disappearing remains of the vast ice fields that covered the larger part of the earth during our most recent ice age.

In the midst of such a tropical area, then, a vast meteor of most extraordinary weight and material had fallen, with such speed and force as to penetrate deep into the earth and thus liberate a considerable quantity of the internal heat of the planet.

For centuries this heat poured out of this great orifice and its radiating crevasses, attracting but little attention from the native tribes and the strange animals of the surrounding country.

At length the slow arrival of our most recent ice age gradually chilled that part of the world; and drove the tropical flora and fauna equator-wards—all except a few animals and a single tribe of primitive people, who by mere chance found warmth and asylum among the earth-heated crevasses and close to the open mouth of the great crater.

Here roots and herbage and a few nuts and fruits survived in narrow fringes long after the surrounding country had reverted to a glaciated condition.

This great expanse of frigid country ultimately cut off the retreat of the inhabitants living in the warm area, even had they desired to migrate equator-wards.

Very soon these people must have lost all knowledge of the former condition of the country; for with a people who have no written language, real historic knowledge cannot survive more than a few generations.

The Final Condition of the People

GRADUALLY they drove the wild animals into the more rugged fastnesses and slowly and painfully, as accident and budding human ingenuity dictated, they commenced to lead their precious heat emanating from the Great Magma further and further from its source, and to make the most of their meagre opportunities.

No doubt at first their heat ducts were mere animal burrows or primitive covered ditches, a few feet in length. Such an arrangement would permit of raising a few additional stalks of maize; Indian corn is one of the oldest and by far the best balanced food plant known to man.

The gradual extension of the heating system was a matter of growth and enlarged food demands, incident to centuries of tribal growth.

At length these people commenced to fashion homes by excavating in the face of nearby sandstone cliffs; and into these dwellings they led the life-preserving heat from a near-by crevasse in the ground.

Finally the heat that issued from the ground and that protected them and theirs from the relentless elements became an object of adoration, and was incorporated into their primitive religion and given an exalted place of honor beside the old god, the Sun.

As time went on the wild animals grew more and more scarce, until it was evident that they were nearing extinction; even as our own wild animals are fast disappearing. It was decided—by what primitive mental processes it is hard to say—to protect the fast succumbing remnants and to preserve them for future generations.

So the larger animals were no longer killed for meat by armed hunting parties; and only a few of the comparatively tame guanacos—animals about the size of sheep, now common only to South American countries—were annually taken for sacrifice and to grace the table of the Zail and his lieutenants.

It was such an animal that I had seen slaughtered and sacrificed upon my arrival.

Which brings us back to the subject in hand; my brief and tragic career as a supposedly deified being.

As I have indicated, it was not long after my arrival—my whole stay occupied less than three weeks—until I became aware that certain ones among the Zail's advisers were determined to test further the theory that I possessed divine attributes.

By the tone of their voices and the scope of their gestures I was early convinced that they were suggesting some plan of procedure to their superior, and that he was opposed to any such course of action. Whether he had become convinced on account of my glass and watch, or whether he was naturally a little more spiritually minded and religious than his subordinates I could not determine. That they finally prevailed upon him to countenance an experiment along their suggested lines, was all too evident from what transpired.

One day, when I had explored the greater part of the whole oasis and had become quite conversant with the affairs of the community, I was told by means of many signs and gestures that on the morrow it had been planned to take me to the game preserves to show me the animals.

I was quite elated at the prospect; for I was curious to know what kind of animals they were, and what, if any, changes they had undergone as a result of their long stay in this strange and restricted environment.

The Animal Preserves

I KNEW that some of the animals were very large, for I had several times caught a glimpse of some of them in the distance.

At such times, however, I had always been discouraged by the attitude of my escorts from going closer for a better view.

Although courteous and obliging, they had plainly indicated that they did not desire me to go any nearer to the animals, or even to enter the area set apart for their preserve.

Whether this was because they deemed it dangerous, or because of religious scruples, I could only conjecture.

So when it was announced that at last I was to visit the animals, I surmised that necessary precautions against danger had been instituted, or else their religious scruples had been overcome.

Indeed the indications next morning seemed to favor the personal danger hypothesis; for the escort assembled as we prepared for the start was made up of no less than a score of armed men.

Their arms consisted of heavy spears; some long, some short; and a variety of heavy spiked clubs and stone axes.

But the religious hypothesis was not altogether dissipated; for, in the wake of the armed body guard, there was a considerable company of priests in full regalia!

As we set out for the short journey I was surprised to find that neither the Zail nor any of his higher officials were among the number of my escort.

This fact was a little disconcerting, since on all former trips the Zail either had accompanied me himself or entrusted me to one of his personal representatives. Now an old priest was in charge.

When after a brief journey we came to the game preserve, we found that it was set apart at this boundary by a crude stone fence of considerable height.

We passed through a small opening in this structure, which had been barricaded by fragments of tree trunks and flat stones.

I could see a number of large animals; two or three small flocks of guanacos were feeding not far away.

In the immediate foreground were signs of recent feeding of animals. There were scattered corn stalks and other fodder, indicating that the herbage native to the region was not sufficient to sustain the wild life within its borders, and that the supply was supplemented from time to time from the crops of the farm lands.

Our party proceeded very circumspectly into the wild fastnesses; sending scouts ahead to determine our route and, I suspected, to protect us from any lurking ferocious beast.

As we progressed it became evident that most of the small district was made up of swamp areas, interspersed with rocky hillocks.

We passed a gang of laborers, repairing a heat conduit. In the distance we heard such a barking as I had heard from the summit of the cliff on the day of my arrival. Presently we came upon a group of small semi-acquatic animals feeding among some rushes.

They had ungainly, awkward bodies, short legs with apparently webbed feet, and long necks with small duck-billed heads.

I was entirely unable to identify these creatures. They resembled nothing so much as pictures of prehistoric animals, such as naturalists suppose were the possessors of the fossilized skeletons so often found in Pleistocene and Miocene rock strata.

It occurred to me that these might indeed be the survivors of some of those old families; and that their development into more modern types had been retarded or perhaps definitely arrested by their restricted and unnatural environment.

This was a novel thought to me, and it gave me hope of seeing some very interesting creatures.

Inspecting the Strange Animals and Plant Life

PERHAPS I might be privileged, as no other member of the civilized world has ever been, to look upon the dinosaur, the pterodactyl and the other saurians; and many other survivors of that far away time, which fundamentalists believe never existed except in the minds of pseudo-scientists.

A glance about at the plants we were passing only served to heighten this hope; for none of them were

recognizable species, except perhaps some large ferns. No doubt both the flora and fauna of this district were left-overs from an earlier geological epoch.

And now our scouts cautioned silence; as we entered a boulder-strewn area and ascended, single file, a steep declivity at the brink of a granite outcropping which projected over a tiny meadow.

From this vantage point we saw below us, but close at hand, two very large animals.

One of them, not more than ten rods away and standing at ease, I recognized instantly by his long, upcurving tusks and elephantine shape as a mammoth.

Yes; there could be no doubt that he was one of those huge creatures which so long inhabited a greater part of the earth's surface; and whose cold-storage remains now supply a large portion of the ivory coming from Siberia; and whose frozen flesh, still covered with shaggy hair, is sometimes found at the bottoms of deep, glacier-filled ravines in various portions of the far North.

He was a gigantic specimen; far larger than any elephant I had ever seen.

My amazed eye wandered from him to another great animal of slightly smaller stature but much fiercer mien who was standing almost beneath us at the very base of the cliff.

He was of the perissodactyl family; obviously some sort of rhinoceros. His nose was armed with one enormous white horn, extending upward and slightly backward; and his entire body, not unlike but vastly surpassing in size that of a modern rhino, was completely covered by a dense coat of woolly fur or hair.

"A real woolly rhinoceros of the Pleistocene period," I said to myself as I lay prone on my stomach and peered, entranced, over the edge of the cliff and down at the almost unbelievable sight below me.

Several of my companions were lying beside me, likewise peering down.

To them, of course, it was not such an unexpected spectacle; and they naturally evinced no great interest nor surprise.

Having made mental notes of the appearance of the woolly rhino, my attention soon reverted to the mammoth; and I remained for some time in deep contemplation of his strangeness.

Of a sudden I was brought back to a consciousness of my surroundings by a commotion close at hand; and looking up, to my surprise I saw that several of the armed guard were in the very act of pouncing on my prostrate form!

Before I had time to give voice to protest, they were upon me.

Holding me firmly down to the ground, they wrapped a length of rope, crudely fashioned from braided rushes, about my body under the arms and rolled me off the edge of the cliff.

For a moment they held me suspended half way down the face of the ledge and then dropped me rather precipitately to the bottom by the mere expedient of letting go the two ends of the rope.

The whole affair occupied but a few moments; but during that brief space of time my brain, moved by excitement and danger to extraordinary activity, was able to grasp the design of the whole plot.

A Test of My Divinity

IN order to test my divinity, they had decided to cast me among the wild beasts. Then if I really possessed divine attributes, I should be able in my omnipotence to quell these great beasts, or perhaps pass among them unnoticed and unafraid.

On the other hand, if I proved to be only human, the beasts would naturally destroy me; and the community would be well rid of an impostor.

I do not know yet by what peculiar quirk of imagination they reasoned that I might be harmed by the force of gravity if they did not use a rope to let me down the face of the cliff, even though I was endowed with divine omnipotence and might work my will with the wild beasts.

I suspect that the Zail and his advisers refrained from accompanying me on this occasion in order to spare themselves the embarrassment incident to the surprise attack, and my impression that they were double-crossing a friend.

Besides, they may have entertained some vague notion that in case I did really rise superior to the occasion and establish my divinity and omnipotence, I would be less likely to vent my wrath on them, since they could deny that they had any hand in the affair.

As for the priests, this was strictly within their province, since they were supposed to have insight and authority in all things spiritual. I suspect that as a matter of fact they were the instigators of the whole plot.

With some such thoughts scurrying through my mind, I came with a heavy thud to earth not more than a score of yards from the woolly rhinoceros and directly in front in him.

As I recovered from the shock and established my bearings, I saw that the great beast had tossed his horned nose in the air and was sniffing audibly and ominously.

Instantly it occurred to me that rhinos are usually endowed with rather poor sight; so I decided to remain perfectly still, in the hope of escaping detection.

My hope, however, was ill-founded; the ponderous animal gave a snort of rage and lowering his murderous horn rushed straight at me.

His thundering rush fairly shook the ground as he came charging toward me.

The Attack by the Wooly Rhinoceros

I WAS so terrified that I did not stop to consider what effect my actions would have on the row of onlookers at the top of the cliff. I took to my heels in a manner very much out of keeping with the dignity and omnipotence of even a lesser deity.

I ran without thought of direction, but with the single idea of developing speed.

What was my consternation on glancing ahead to see that I was making directly for the great hulking mammoth!

At that moment he raised his head with a defiant gesture and gave vent to a tremendous trumpeting sound that went reverberating through the surrounding hills in a manner which made me stop short in my tracks and almost forget my enraged pursuer. Almost, but not quite. A quick glance over my shoulder revealed him tearing after me amid a perfect shower of flying turf.

It was too late to turn back. Of the two animals the mammoth seemed the less vicious and formidable; and besides, he might not be conscious of my presence, but only aware of the onslaught of my noisy and ponderous pursuer.

I decided to try to dodge around him, and under cover of his bulk seek some place of shelter.

So with a speed born of fear and desperation I ran on till I was close upon the mountainous beast. Swerving sharply to the right, I skirted his legs and dove into a narrow alley between two fairly large boulders.

I looked about just in time to see the great mammoth lower his head with its two upturned and backward curved tusks to meet the blind rush of the oncoming single horned rhino.

The huge woolly creature turned neither to the right nor the left; but came plowing on with seemingly irresistible force.

With a terrible impact he brought up against the convex surfaces of the mammoth's huge tusks. He was stopped; but the force of the blow nearly lifted the larger beast from his feet, and all but tipped him over backward.

The fierce rhino was badly jarred but not discouraged. Making a lunge at the mammoth he gored his shoulder with his huge horn, and with a toss of his head ripped a terrible gash in the animal's deep flesh.

With a roar of pain the mammoth recoiled; and then, visibly gathering his strength for a supreme effort, he charged his antagonist and literally bowled him over and sent him sprawling, almost among the very rocks where I had sought temporary shelter.

Beating a hasty retreat, I looked about for some means of escape.

Rounding a little hill, I spied a high rock with a tall sapling growing beside it. I made for it with all speed, and scurried up the sapling with an agility such as I had never dreamed I was capable of displaying.

With the noise of the Gargantuan conflict still going on behind me I swung across, simian-wise, to the narrow top of the high rock.

Looking about me I perceived that a number of animals from as many directions were hurrying to the scene of the battle; no doubt attracted by the noise, and by the smell of fresh blood.

Perhaps experience had taught them that there might be a fresh and gigantic carcass to feed upon.

On account of the projecting rim of an intervening hill, I could not follow the fortunes of the animal war. If I might believe my ears, however, it raged fast and furious. But it was soon over.

Whether the fierce rhino was killed or was driven off I could only surmise; but the mammoth soon emerged from behind the hill and came past my hiding place. One of his great curved tusks was broken off short. Blood was flowing freely from the open gash in his shoulder, and from a no less extensive one in his flank. He was limping painfully.

He soon passed from sight; but in his wake came a number of skulking, tiger-like animals and several other no less vicious and bloodthirsty looking beasts, of a kind quite unknown to me. No doubt they could have been identified easily had I been more familiar with prehistoric animals.

The Wounded Mammoth—A Concerted Attack by Many Animals

AND now to my renewed consternation a number of these creatures turned their attention to me and came growling and snarling about my insecure refuge.

I looked about for some means of defense; but there was none, save a few large fragments of broken rock that had evidently been loosened by a recent attack of frost.

Hardly had I selected one of these when one of the fierce animals gave a great spring and landed on a narrow ledge of the rock, scarcely three yards below me. The ledge was not wide enough to afford a footing, and before he could scramble up I let fly with the heavy piece of rock and succeeded in dislodging him.

But now on every hand I saw numerous and strange beasts of prey emerging from various avenues of approach. Looking away to the top of the cliff, whence I had been so unceremoniously dumped, I saw the group of priests huddled together with the armed guard regimented above them, viewing my predicament.

Ruefully I thought of their probable satisfaction at the anticipation that I must soon succumb; thus their teachings and protestations would be vindicated.

Of a sudden a dark shadow enveloped me, and I heard a whizzing noise above.

Looking up, to my astonishment I saw a great, shining dirigible. And peering over the sides of the forward gondola were a number of people with telescopes and binoculars.

I tore off my coat and waved it frantically and shouted at the top of my voice.

After a moment I heard an answering hail, and the reports of two shots.

The airship drifted on past; but I saw that it was turning and dropping lower. I felt sure that I had been discovered, and that an attempt would be made to rescue me. But I had no time to give to self-congratulation; for the wild beasts were becoming more bold and menacing. And now another tiger-like beast

leaped upon the shelf from which I had knocked the one, and I was obliged to give battle.

I cast the largest stone I could dislodge straight at him; but he clung with tenacious fury to his precarious hold and refused to budge.

Almost at the same moment another animal came scrambling up the sapling which I had climbed and threatened to leap upon me. He was only momentarily deterred by a well-aimed chunk of rock that struck him fairly in the face.

Although I was working frantically, I was conscious that the dirigible had again arrived above me and that it was hovering at a very low altitude.

My Rescue

YOU can imagine my relief and joy when I saw a pair of rings on the ends of a doubled rope descend before my very eyes.

I made a spring and grasped one of them just as one of my assailants came scrambling up from somewhere in the back of my protecting rock.

Catching the other ring, and drawing myself up with an agility that would have done credit to an acrobat, I thrust my legs through the supporting rings and looked almost calmly down on the animals who were now making a wild dash from all quarters and landing on top of the stone.

Quickly the rope was reeled in, and I felt myself ascending rapidly toward the hovering dirigible.

Glancing toward the onlooking group of priests and guards, I saw that they were prostrating themselves in attitudes of reverence and submission.

For one fleeting moment I felt a thrill of triumph.

Surely now they must be entirely convinced that I was no mere human, since I was able to summon aid from the very skies.

And here ends my story of adventure; except that perhaps I ought to explain how I came to be rescued.

At about the time that we were preparing at camp for our ill-fated exploring expedition, one of the larger dirigible building companies was testing out their latest and most improved airship.

It proved to be swift and manageable beyond their most optimistic expectations. In fact, it proved to be in every way far superior to anything in the line of lighter than air craft that had been devised.

Naturally the builders and navigators were ambitious to perform some extraordinary feat that would demonstrate to the world that something great had really been accomplished.

Meanwhile Bogardus and I had taken off into the frozen fastnesses and did not return at the appointed time. In fact we did not return the next day, nor the next.

The other members of the expedition became alarmed and broadcast news of our peril to all antarctic stations, asking all to be on the lookout for us. The other two planes which remained in camp were hurriedly put in commission and sent out.

They searched as far as their flying range would safely permit and returned to camp without me.

By this time the entire world, through the medium of radio, was aware of our disappearance.

The owners of the new ship were not slow to realize that here was a chance for not only a spectacular flight but possibly an opportunity to do some real rescue work.

They lost no time in dispatching the ship to the camp of the Gordon Expedition, and sent a great many messages to the leading newspapers saying the new ship was flying to the rescue.

Making a successful and unbelievably swift flight, they arrived at camp; and after collecting all available data and with several members of the expedition, took off in the direction where we had been directed to explore.

After passing far beyond where it was thought we could have reasonably flown and manœuvering back and forth for some hours, they discovered the gasoline tin that I had thrown away.

Thus they were assured that some craft, and presumably ours had passed that way.

Pressing on then in the indicated direction of our flight they later came upon our wrecked plane.

Here they made a landing.

Of Bogardus they naturally found nothing; but they did find my tracks, where I had departed across the drifted snow.

Taking off again, they followed straight on and soon were rewarded by finding where I had passed the night and discarded my empty water flask.

A little while later they detected the dark spot in the white, made by my deserted blankets lying on a block of broken ice.

Still continuing the search they quickly discovered the white vapor-cloud hanging over the heat crater and hastened to investigate.

A hurried exploration of the little heat protected oasis served to locate me, and I was quickly rescued.

Needless to say, when I returned to civilization I had lost all yearning to explore the Antarctic snowcap.

However, an expedition under the auspices of several of our leading scientific organizations is now being fitted out for the purpose of revisiting this little world in the midst of the wilderness, in order to study its flora and fauna and—incidentally—to civilize the natives.

Perhaps I shall go with them. As yet I am undecided.

THE END.

There was five o' 'us to go out, an', lads, that's an awful 'death . . .! When a man is expelled from an airlock, under pressure, it's just like blowin' him up. The pressure inside bein' released suddenly kills him almost instantly! . . .

Adrift on a Meteor

By Jack Winks

THIS is a story supposed to be told to children by an old space-sailor. It will hold the attention of the reader, whether young or old, to its unexpected end. It is a very excellent short story with enough exaggeration and adventure in it to grip the reader and to make him hope that the author will carry out his implied promise to be found in the last lines and give us some more of the same. The hero of the story, who is the narrator, plays with the laws of gravitation in outer space and certainly holds the reader in suspense until he brings him to a quite unanticipated end of the recital.

Illustrated by MOREY

THE DAY was warm and the sun shone down from a cloudless sky. The shrill, harsh, summer songs of the cicadas from trees along the street made the hot air vibrant with life, while a flock of sparrows with raucous chatter was busily feeding in the grass of a large, well-kept lawn.

Three small boys came pelting laughingly down the street. They swerved with a shrill shout up across the lawn, where sat an old man in a canvas chair. The boys trooped respectfully before him. He was white of hair and beard, but his clear, blue eyes seemed to contain the serenity and fathomless depths of space where he had passed so many of his days—a sailor of the limitless void!

" 'Lo, grandad." piped up one tow-headed youngster of ten. "We were playin' space-sailor, an' Jimmy, here, says that there's air out there." Here he gestured broadly toward the zenith. There was a certain amount of contempt for Jimmy's learning in his voice as he went on, "There ain't any air out in space, is there?"

Is There Any Air in Space?

OLD Jake Henderson lowered his gaze. He smiled a slow smile and replied kindly:

"Ye're both right, Johnny my lad, an' ye're both wrong by the same token. Ye see, there's gas—what you'd call air—out in space, but its density is so all-fired low 'at, far's we're concerned, it's a perfect vacuum. In the space between the planets they do say 'at the density's about 1800 atoms per cubic foot, as compared with five trillion trillion atoms per cubic foot here on earth! Ye see, the difference is right considerable!"

Three expressions of awed amazement were almost coincident.

"Gee!" "Gosh!"

"I told you so!" triumphed Jimmy. "Say, Cap'n Henderson, won't you tell us a story?"

"Yes, do tell us a story!" chorused the others instantly.

The eager trio grouped itself around the old man with lively anticipation. As he removed his old, black pipe, and spat speculatively, the boys sank down into a hushed circle. They had evidently heard stories from his lips before.

Captain Henderson's Story

"WELL, lads, what sort o' story did ye want to hear? A tale o' pirates an' mutineers, or a story o' exploration on Venus, or Ganymede?"

There was no hesitation in the reply.

"Oh, Cap'n. Tell us about the pirates an' mutineers!"

It was a long time ago, Johnny (began Cap'n Henderson), but I'll ne'er forget it, 'cause it ain't every day as one gets marooned on a meteor an' lives to tell the tale! A right remarkable meteor that was, too.

In them days we didn't have all the new-fangled folderols that every space-skipper thinks he has to have now. Interplanetary navigation was in its infancy, an' a sight cruder than it is now an' a sight more dangerous. Ye see, there wasn't no barrier barrages powerful enough to stop a fair size meteor, an' the System hadn't been charted hardly at all.

The barrier barrage, lads, is a high frequency wave generated on the ship, an' broadcasted. Any meteor enterin' it at high speed generates big electric an' magnetic losses in itself an' slows down or is diverted. If it's small enough the heat generated in it is sometimes enough to melt a meteor. So navigation through meteor swarms boils down to dodgin' the big ones. A sailorman calls the barrages the "cushions."

As I was saying, meteor swarms an' asteroids an' "holes" o' high, "potentional" were hardly ever plotted on accurate charts, an when they were, the ephemeris was ginerally wrong! Navigation was kind o' crude an' more or less hit or miss. Most commercial captains piloted by rule o' thumb, an' Cap'n Brandes was no exception.

Captain Brandes and His Rule of Thumb

HE knew a little more o' sidereal navigation than some—I learned most I knew o' it at the time from him. I wasn't supposed to do any pilotin' 'cause I was on'y a bo'sn, but navigatin' seemed to sort o' fascinate me, an' I put in many an hour off watch goin' over my books. When I was on duty, I had charge o' the hull, an' had to see that all seams was kep' tight, an' that all air locks was in A-1 operatin' order. Don't sound like a very excitin' job, does it? But a lot depended on the bo'sn, anayways. He was continually inspectin' an' if a fast leak started, he worked with as many as five men under him for hours at a stretch. Always on a trip he spent many hours in a space suit—a "strait jacket" or an "Iron Bess" in sailor slang.

The crew o' the *Polyphemus* was a hard bit lot. The radium an' gantium mines on Ganymede had just been opened up an' every adventurer as could scrape up the price o' a ship—or steal one—was cruisin' 'round lookin' for easy money. Many found it by piratin' the radium ships, although that was risky business, for the Syndicate as owned 'em was rich an' powerful, an' they was about the best ships afloat. They could easy show their heels to a comet an' was heavy armed with weapons like cathode rays an' high frequency beams—"cookers" in sailor lingo—for they'd cook anything as had any metal in 'em, an' kill a man in short order! The System Police could never track down the cleverest ones, though they was suspected o' havin' a base on the "Ring Ball" (Saturn) or one o' his moons.

Then besides the out an' out pirates there were the others who just cruised 'round, explorin' an' pickin' up enough minerals to keep 'em goin' an' encourage 'em to further efforts. The *Polyphemus* belonged in this class, an' don't let her name mislead ye! She was named for a giant, but she was just a little, slow old pig (A slow awkward ship). Ye see, she was 'bout four hundred feet long—

"Grandad, how long is four hundred feet?" interrupted Johnny.

"Now, don't interrupt me when I'm tellin' ye a story." said the old man severely. "Let's see, now—I never could get used to the metric system! In my day there was a sight o' agitation to change over to it, but I never could see why. The old system o' feet an' miles was good enough for anybody! . . . Now four-hundred feet's 'bout 130 meters."

The *Polyphemus* was really 120 meters long an' 35 meters in diameter, an' if she wobbled along at fifty-five kilometers per second she was doin' good. Her plates wasn't none too sound either as I found out.

We left Alma Mater (the earth) with that old tank on July 22nd 2014 an' she was just one mishap after another from then on. We was bound for the Family (the asteroids) to poke 'round a bit on Iris an' some o' her neighbors. Two days out the trouble begin!

Troubles Begin for the *Polyphemus*

CAP'N BRANDES was a 'scared o' his ship, I think, an' overtaxed the cushion generators tryin' to keep up a high field strength. We ran afoul o' a bank o' gravel (a swarm of small meteors) 'bout eight million kilos from earth, an' some bumped us, but not serious. Just as we was passin' out, however, two tubes blew out, an' the cushions failed! . . .

I tell you that was a thrill! We was through the rocks 'fore ye could say "Sun," but not till one big one had crashed through the port bow into a storeroom! Lucky there was no one there, so all we lost was some spoiled stores an' the air, for the bulkheads was tight.

But, say, did the Cap'n go crazy mad? He cussed the whole crew up one side an' down the other, an' fined the quartermaster who had charge o' the cushions a month's pay. But us, as had nothing to do with the apparatus, he lambasted proper, an' what he didn't tell us about our ancestors for ten generations back wasn't worth hearin'. He begin with the mate, an' blistered us all with impartiality! I never see a man make such an art o' swearin'!

Well, there wasn't much to do, but take it without no back talk, an' stick in new tubes as quick as we could. 'Twasn't likely we'd run into another bank o' gravel right away.

There was many a black look cast in the direction o' Cap'n Brandes. The crew was a tough bunch o' yagoes an' I knew in my heart that they wouldn't take too much abuse.

Finally the thing blowed over an' we was sittin' pretty with nothin' much to do but set in the crummy (crew's quarters) an' play cards. It was real funny to play out there in space, for our acceleration had been cut off, an' we was ridin' free. Ye see, the cards, nor us didn't weigh anything, much, an' we could as lief play on the ceiling or the walls as on the deck.

Getting Acquainted with the Crew

AS for me I was just gettin' familiar with the crew. The men as worked under me was all okay 'cept for one—a beefy albino we called "Whity" Mungo. He was the bully o' the crummy an' we didn't knock it off so well together.

After the accident, when the hole had been patched, I started an inspection of the hull for other leaks. I orders Mungo into a suit for the first time, an' him an' me put on the strait jackets to go outside. He was to cover the port side an' I the starboard half. Each seam had to be tested with a little instrument like a stetho-

scope which would detect the smallest hiss of escapin' air. Our gauges said that we was loosin' air faster than we should.

Lads, it sure is a queer feelin' to walk all 'round over a cylinder like that with nothin' above or below! Her gravitational attraction was enough to hold us on if we didn't make no fast moves, but we was anchored to hand rings, an' carried reaction tubes too.

Looking for Leaks

I FOUND a bad leak 'round a steamer (rocket nozzle) an' I had to be careful not to get in the way of that discharge, for though we was ridin' free (coasting without acceleration) she might kick back automatically at any time to clear a house (a large meteor) an' knock me to kingdom come! But I worked along fairly easy.

Big Mungo was on his first high flier (space trip) an' he sure was space-sick when he got back to the crummy! White as he was anyhow, with his pink eyes an' snowy hair, he sure looked like a dead man when he was dragged out o' his Iron Bess an' floated through the inside o' the airlock. He'd keeled over just as we got inside. If ye'r ever space sick, Lads, ye'll remember it all yer lives!

"Whitey," I says a bit later, joshin' him a little, "ye wasn't cut out for space flyin', was ye? Well, don't cry, me lad. After another trip or two, maybe ye can do a man's job."

Well, sir, he blew right up. Called me a swarm o' names, he did, as would make any sailorman fightin' mad! The Cap'n an' all the commissioned officers was up in the lighthouse (navigating conning tower) castin' anxious glances at a little comet comin' our way, an' I decided to settle matters right then an' there.

The Impending Fight Comes Off

NOW, I never was much for size, ye know boys, but I'd fit a few fights in float (in weightlessness) an' knew how to handle myself, the which gave me a considerable advantage. Ye know, in weighlessness a steel anvil'd float 'round like a feather, but that ain't sayin' that if ye'd get hit by one it'd feel like a feather! No, sir! All her mass would still be actin', an' while it wouldn't be quite as serious as gettin' an anvil in the face on the earth, still it's be a slightly oncomfortable feelin'!

So, I grabbed a hand-line to anchor myself, an' sailed into Mungo with my free fist. He was on guard, though an' caught my blow on his shoulder. Then he countered with a snarl, an' the force o' his blow broke my grip on the line, an' sent me sailin' back against a bulkhead with a crash!

Like a flash, Mungo sprang at me, but I wasn't out by a long shot, although dazed. So timin' myself with a great effort, I leaped up, an' Mungo barged by under me! He was goin' too fast to stop, an smacked into that steel bulkhead headfirst. His 240 pounds o' mass was actin' still, an' it knocked him silly!

From then on I had it easy. Whitey was out on his feet, an' I knocked him "down" twice. The second time, he was out as cold as a haunch o' beef, an' floated back against the floor an' wallowin' over on his face, sank against the earth side, where she was still attractin' us a mite.

That was the end o' Whitey Mungo with me. He was licked an' all the boys knew it. Some o' them were kind o' snooty till he knocked the atmosphere out o' a few o' them. Then they got very respectful-like! But only two o' them looked to him as a leader after that.

We was twenty days—circles in sailor slang for there wasn't neither day nor night, an' a day was measured by one 24 hour circle o' the hour hand—we was twenty circles, I say, reachin' the orbit o' Mars, but the Apple (Mars) was on the other side o' the Sun an' we didn't see it.

Hard luck kept us humpin' an' we looked Death in the face an' in many a guise. The skipper was morose an' crabby an' the temper o' the crew got hotter an' hotter under his overbearin' abuse. There was talk o' rationin' air, already, an' Mutiny began to show its ugly head. I reminded the hot heads o' the agreement they had signed for the voyage, an' for a time I thought they had dropped the idea.

Mutiny Afoot

IT was some ten circles later when I overheard a conversation between Mungo, an' his special crony Bob Cruet. It was on'y a couple o' words, but it was enough to warn me that there was something up.

I went straight to the navigatin' cabin, where the Cap'n was with the mate an' a quartermaster.

"Cap'n, sir, I got information ye should hear." He came closer an' I lowered my voice to a whisper, "There's mutiny afoot!"

"A mutiny! Impossible! The men wouldn't dare mutiny! They could never return to earth then! . . . What makes you think they're planning a mutiny, Henderson?"

I told him what I knew.

"Well, by Jupiter!" growled Brandes, shakin' his fist, "I'll take care of that pack of wolves!—Compton!—"

But, 'fore the mate had time to answer, who should pop into the lighthouse but Whitey Mungo, an' Ben Polaski. There was a nasty grin on Whitey's face, an' him an' Ben covered us all with needle pistols.

"Here, you," blustered Brandes, his face like a beet, "I'll have you men in irons! I'll give you the space cure! Put those damn pistols away!—"

Mungo interrupted him with a sneer.

The Mutineers and the Captain

"WHY, Cap'n Brandes, Please don't get so profane! Yuh shock my tender ears!" He stepped forward with a pair o' handcuffs, an' his face was a

picture o' devilish delight as he went on, "Give me the space cure, will yuh! Huh! Yuh an' yer dirty first squeeze is done fer! Yer chief engineer is floatin' out where yuh'll soon be! This old tub is mine! Don't resist, or yuh'll get yer head bashed in!

"As fer yuh, Jake Henderson, yuh dirty, low down, sneakin' traitor! Take that!"

An' the skunk fired at me!

But, quick as he was Ben Polaski was quicker! He knocked up the gun an' the deadly needle sizzled into a port. He snapped.

"No you don't, Whitey! Jake Henderson, he's a decent yahoo an' you can't keel him while I'm here—not lak' that! He save' my life once, an' I don't forget!"

"Okay, yuh fool!" snorted Mungo, "But he'll have to walk home with the rest!" With that he proceeded to tie my hands behind me tighter than Dick's hatband!

Well, lads, ye may believe I give myself up for lost. The mutineers figgered I was a traitor to them, an' I knew what they'd do with a traitor—the same as any pirate crew'd do! I'd walk the plank—take the long walk through the airlock, same as Capn's Brandes an' the rest. I couldn't even make a fight for it, for I was trussed up like a pig.

My mind was a blank; there was no use thinkin' o' the good home I'd left to come out into space, or o' the little mean things I might o' done. It wasn't no use talkin' either, so I just said nothin'.

The mutineers didn't waste no time. I spoke to one I knew used to like me.

"What you guys goin' to do with me, Ernie?"

He shifts his quid an' spits an' says cool-like.

"Wha'd youse t'ink we'd do wit a double-crosser?"

I knowed then that there was no reasonin' with them, an' that even Ben Polaski couldn't save me. My fate, as them writer fellers say, was sealed!

One by one, the mutineers lined us up inside the double hatch (the airlock). It was taps for all o' us. I heard a couple o' voices then soft-like. One I knew was good old Ben.

"But, Hank, I tell you Jake, he is an old friend! I cannot let Whitey keel him lak this!"

"Sorry, Ben, old timer. I can't do anything for you. Whitey wouldn't listen to me, and I ain't so crazy about a turncoat, either."

Not a Turncoat

"BUT, Jake, he's not a turncoat! He wouldn't t'row in with us at all!"

"It's no go. But see here . . ." Here the conversation dwindled to the point where I couldn't hear. I strained my ears. Good old Ben! But he couldn't do anything for me.

Mungo was now ready for the big doin's. He come back from the lighthouse with another petty officer that, I knew, they all hated. Rubbin' his hands together, he begin talkin' to his aids in a low voice.

Out o' the corner o' my eye, I saw Ben approach him—saw the snarl that curled Whitey's lips when Ben begin to speak—saw him strike little Ben an' knock him into a heap! I was boilin', but helpless!

Hank said something to Mungo, now an' I see his eyes begin to shine, an' a devilish grin bared his yellow teeth. He patted Hank on the shoulder.

Ben, meanwhile picked himself up an' came weakly to me.

"Jake," he whispered," old man, "I couldn't do anything for you.

"'S'all right, Ben! I saw the big bruiser hit ye! Take care o' yerself an' don't mind me. Ain't afraid to die."

"Here," cried Whitey roughly, "What's goin' on here?"

I had to put Ben right, if I could, so I rips out.

"Ye snivelin' low-down cur! Ye little two-faced devil! Git away from me!"

Ben looked hurt, not understandin' that I meant them words for Mungo's ears. Big Mungo, he grinned, like he was sure enjoyin' himself, an' turnin' gave the order to open the airlock.

There was five o' us to go out, an', lads, that's an awful death . . .! When a man is expelled from an airlock, under pressure, it's just like blowin' him up. The pressure inside being released suddenly kills him almost instantly! . . .

The Mutineers Triumph

ONE by one we said goodbye to them an' they took the long jump. They was all game an' there wasn't enough yellow in the lot to paint a flea's eyebrow! . . .

I was last, o' course. Mungo wanted me to see all the others go, an that wasn't none too good for my nerves, but my hand was pretty steady when they came to lead me to that little oval door. Then Whitey interfered. With a sneer he stepped in front o' me.

"Yuh can tattle all yuh want where yuh're goin', but you won't tattle on Bill Mungo again! Take that, an' that, damn yuh;" an' he slapped me back an' forth a couple o' times. "I got a special treat in store fer yuh, Jake. Yuh won't die instanter like these other squirrels. Naw! You'll linger fer hours an' die slow. Bring out an Iron Bess, Ernie . . ."

"T'hell with ye!" I says, "I'd rather die this way than live as a friend o' yers, ye white-livered pirate! I still got my self-respect, anyhow!"

But he just grinned again.

Then he had me bolted into that space armor; I was to be a living meteor, until my oxygen give out! I come as near, then to bein' scared to death as I ever was, I guess! To die instantly was nothing; anyone sailin' the ether was prepared for that at any time, but to linger for hours in a cramped iron suit sufferin' from lack o' air an' the Sun's uninterrupted rays on one side an' the cold o' outer space on the other wasn't no pleasant prospect!"

But I didn't give Whitey no pleasure. I accepted my fate without a word an' made no resistance. They

bustled me into the airlock an' "Puff!" I was floatin' in free space!

Nothin' above, nothin' below an' nothin' all 'round me! . . . I floated in emptiness for the *Polyphemus* soon drew away from me. I was a human meteor, zippin' along away from the Boss Star (the sun). I didn't know how fast I was goin' but, if I was receedin' from the Sun at over forty-three kilometers per second, I'd probably escape from the System forever. What a prospect! . . . On the other hand, if I was travelin' slower, I'd likely be captured by some asteroid or planet, or even by the Sun, himself. Ye see, bodies goin' over forty-three kilometers per second usually belong to an' return to interstellar space, while those travelin' slower are usually members o' the Sun's family.

I was a hundred million miles from earth an' I figgered my situation was hopeless. The *Polyphemus* was invisible in an hour, an' I was alone—alone as no one had ever been since the beginning of Time—terrifyingly alone! none of my own kind closer than a hundred thousand miles! . . .

The Flare and the Reaction Tube

I KNOWED that if I lasted long enough, I'd go crazy, so I took a firm grip on my nerve an' begin to take stock o' my suit. I hadn't frozen to death, so I knew Mungo hadn't put my thermocouples out o' commission. Presume as how he didn't think it necessary! Then I tried my knapsack. In the very bottom I found a single radium flare. What use to me? If a ship passed within a million miles it'd be a miracle, an' it'd have to be within 500 or less to see the flare!

Then I examined the reaction tube that a man might use to propel himself in space. There wasn't no single grain o' fuel. I couldn't direct my course no more than a stone . . .

I don't know, Johnny, how long I flew along like that. Anyway, I was takin' what I believed was my last look at earth an' all the stars, when suddenly I noticed a yellow disc approaching me by degrees. I was travelin' at an angle with its course.

It was a big meteor. One we'd have called a "house" on the *Polyphemus*. 'Course it wasn't big astronomically speakin', bein' only a hundred meters or so in diameter, but it loomed up big to me. It looked like some relief, an' I saw I'd land on it.

An' I did; floated down like a feather. A million kilometer fall, an' my legs not even jarred by the landin'!

Cautiously I begin to walk 'round the little planet. She was just a bare rock, roughly spherical. Not an ounce o' atmosphere, water or any livin' thing, o' course. It didn't take me long to explore every square centimeter, an' I elected to stay on the daylight side so my thermocouples which worked by sunlight'd keep me comfortable.

I was feelin' terribly sleepy, but was scared to lie down an' take a nap—as if it made any difference to a man who was sure of death anyway, whether he died asleep or awake! Finally, though, I lay down and quickly fell asleep. My couch a boulder a hundred million miles from earth; My lights the Sun, stars an' planets!

I woke up feelin' kind o' stuffy. My head ached fit to split, an' my whole body felt like I'd been drawn through a knothole.

Feeling Stuffy, with a Headache Besides

I KNEW the feelin'. My air supply was runnin' low, an' the end wasn't far off. I got up very gently, so as not to leave my little world forever—her gravitational attraction was that low, I could have jumped off her easy!

Then I took a last look 'round at that most glorious spectacle in the universe, the surroundin' stars, nebulae, planets an' so on. Then to occupy my mind, I begin to examine my little asteroid closer. It was a kind o' peculiar stone, an' seemed to be one big chunk.

Meanwhile, my relief valve was singin', my ears was ringin', an' my temples throbbin' 'till I thought I was a whole orchestra! Cold sweat rolled down my brow into my eyes; I couldn't wipe it off.

Suddenly my eyes was drawn to a new gleam in the star-sprinkled sky. A track o' luminous gas! A streak comin' nearer! A ship—Or a comet? . . .

My hands trembled so that I could hardly get out the radium flare. Somehow, I got it out an' set her off.

The twenty kilometer finger of fire which she made pointed directly at me an' my little asteroid. I knew that, but my sight was failin' an' only the slight gravity o' the little world kept me from fallin' overboard . . .

WHEN I came to a week later, where do you think I was On the *Polyphemus!* Yes Sir! Ben Polaski was a friend indeed!

After they left me, he lost no time stickin' a knife into Mungo! Then—so he said—it was easy to convince the crew they should try to find me, 'cause I was the only one o' the pack as knew anything o' navigation. They'd been cruisin' round, five hours when they saw my flare. Yes sir, that little guy did a big job! An' he was the one as barely managed to slip the flare into my knapsack, too!

Oh, yes. What about the asteroid?

Well, we took a hitch around her, an' dragged her back to earth with us as a souvenir. Ye see, she was just one big chunk o' radium ore!

"Now, Johnny, run along. I think yer Ma wants ye to do an errand for her. Sure I'll tell ye another story some day."

Author's footnote—

If Old Henderson's habit of mixing feet, miles, and meters, kilometers confuses the reader, the following table may help clear the air:

To convert	miles	to	kilometers,	multiply by	1.61
"	"	feet	" meters	" "	0.305
"	"	meters	" feet	" "	3.28
"	"	kilometers	to miles	" "	0.621

The End

The Essence of Life

By
F. Pragnell

THIS is the first story with which we have been favored by this author, who is an English writer and it is interesting to see how he treats his subject. It tells of visitors from afar who are of supreme power and intelligence and discloses their intentions as developed in a visit to the earth. There is good character drawing in the narration and it is brought to an impressive conclusion, in which something is left to the conjectures of the reader.

Illustrated by MOREY

Foreword

WAS my brother Joseph insane, or did he actually experience all he wrote? There is undoubtedly a streak of insanity in our family. Our mother's grandfather died in a lunatic asylum, and his grandmother was the sole surviving child of a maniac who killed his wife and also two children before destroying himself.

My brother Joseph had a morbid fear that the taint that had missed two generations might come out in one of us or in our children. Perhaps that very fear brought on the evil he dreaded. The narrative before me bears evidence of this fear, in its discussion of the Mendelian principles of heredity. It is a singular document, written by a man who is forever beyond the reach of human questioning. He was a highly imaginative and nervous creature from early childhood, of slim build, with a pathetic, appealing look in his eyes. There is nothing in his tale that could not easily have sprung from his own mind.

My first intimation of the trouble affecting my brother was when I received a letter from him addressed to me at Buffalo, where I have my practice. Unfortunately, I was away at the time, and I received the letter over a fortnight late, when poor Joseph was already beyond all human aid.

"Dear Jim," it runs,

"I am in a difficulty of such importance and magnitude that I cannot express its urgency in this letter. Can you come at once and help me decide?

Yours, Joe."

I have it before me now. Beside it is the lengthy document I found in his desk, headed "To James, or whoever may read."

It is not many hours since I took a last look at my brother. The wheel of the car that crushed his chest missed his face, and he looks puzzled and very pitiful, lying so still. And the evidence showed that he walked straight into the car, apparently deep in thought, and never knew what hit him. . . .

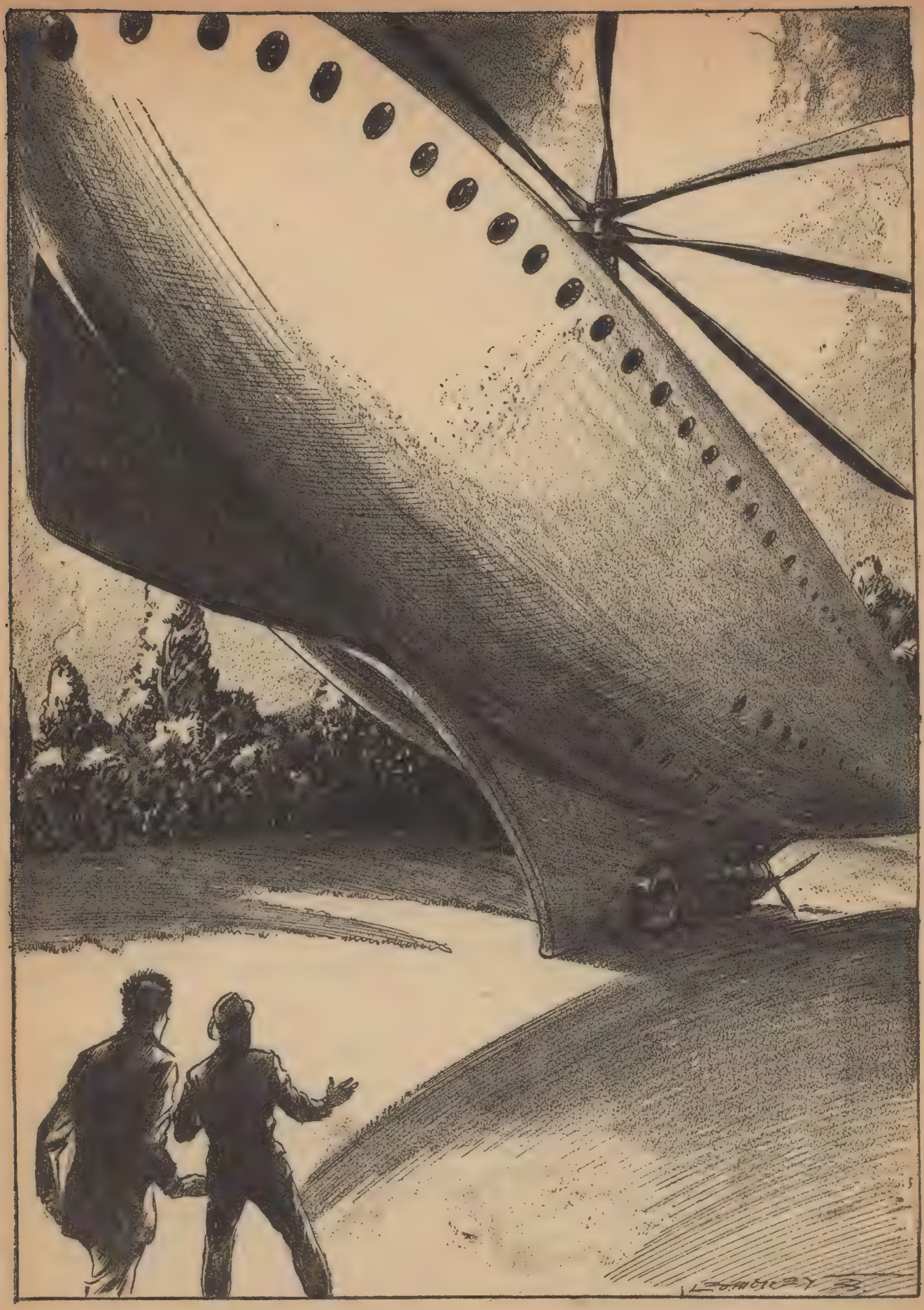
Was it because his pince-nez were gone, smashed, that he seemed to have gone back through life thirty years, to the time when he was but twenty-one, the big elder brother of my earliest memories? Even his hair was less gray. In later years my own developing, physical form and financial success made him appear to shrink to a little, impractical bookworm. After his tragic love affair in England, he came to America to be near me, his oinly living close relative. My wife and he never hit it. She prefers strong capable men.

And now these papers lie before me, the last failure of a brilliant mind.

This document, evidence of my brother's weakness, I regretfully make public because of certain articles that have appeared in the newspapers, concerning the notes found in his pockets and read at the inquest. One read, "Planco brings Essence of Life," another "American birth-rate controlled by alien beings!" But for these notes, and what was made of them, the document would have remained a secret.

Forgive my rambling statements. It is hard to lose my only brother, and my grief is nothing to the thought that he suffered in his last hours from such hallucinations. And I never suspected! The story follows herewith.

James Arthur Hammond, M.D.



In the center was a huge machine I realized at once to be the space-flier. It was about two hundred yards long and eighty wide, shaped rather like a rowing-boat balanced on its keel, presumably by gyroscopes. Landing wheels were close to the keel.

CHAPTER I

Planco

New York, 1931.

To James, or Whoever may Read.

I AM Joseph Hammond, of New York, U. S. A. I have been an American subject for some years, and was previously an Englishman. My modest living I earn by giving lectures and holding classes in Economics. I have also written some books, and quite a lot of newspaper articles dealing with that science.

My adventure began when I first saw Planco. That occurred when I was delivering a lecture on some subject, I forget what, connected with currency, to a none too crowded audience in a schoolroom devoted for the day to that purpose.

He was a man that arrested the attention. Even sitting down, he was obviously of enormous build. (I later found him to be six foot five, and broad in proportion.) But what irresistibly drew one's eyes was something subtly strange about him, something unearthly. His hair was jet black and very thick, brushed straight back and plastered down. His prominent nose was thin and very high-bridged, almost hooked. From under bushy eyebrows a pair of deep-set eyes remained fixed on me during the whole of the lecture. His lips were slightly full, and of that perfection of shape that is usually seen only in women and children. His ears were so close to his head that at first one thought he had none. While one could not pick on any feature and say that it was abnormal, except, perhaps, the extreme pallor of his skin, he was a most singular, striking man, taken altogether.

My Auditor

AS I gave my lecture I found myself trying to read his character from his features, an odd trick of mine, acquired from my father, who was a believer in physiognomy. Obviously not a native American or Englishman, I decided. Probably not even a European. Mongolian? Possibly. But not pure bred.

The fixed attention and alertness of those eyes, to say nothing of the magnificently developed brain-case, showed, I decided, a keen intelligence, obviously capable of great concentration, and, consequently, of a vivid memory. The nose baffled me. Perhaps it showed pugnacity and pride. The mouth suggested a violently emotional and artistic nature. The firm, square jaw obviously told of a strong will. It subsequently transpired that I found all this to be correct.

Following the line of least resistance, I delivered most of my lecture to him personally. Afterwards I answered several questions from members of the audience, mostly feeble, irrelevant questions; then my evening's work was finished. I never expected to see him again, except, perhaps at other lectures.

The next evening, I was correcting papers written by pupils at my classes, in my meagre bachelor apartments, when the mail brought an unexpected letter. It was addressed in a painstaking copy-book hand. Inside was a short strange missive, with no address at the head. It read—

"Mr. Planco to Mr. Joseph Hammond.
"Sir,

I listened to your erudite discourse yesterday with profound advantage. Should my suggestion meet with your pleasure, I should be gratified if you would come to me and discuss the subject over refreshments. My vehicle will be at your door at six in the afternoon."

The message puzzled me. It was apparently written by someone unfamiliar with the English language. I wondered if the writer was the huge man I had noticed at the lecture. "Planco." A strange name!

It was now 6.15. I yielded to curiosity and went downstairs into the street.

Drawn up by the curb was a powerful Rolls Royce. As I stood looking at it, a huge cold hand gripped mine and shook it, a little too vigorously for my comfort. I became aware of my attentive listener.

"Good evening to you, Mr. Hammond," said this person, slowly and carefully. "Enter, and we will depart!"

"Not so quick, Mr. Planco! Allow me to get my hat and coat."

Having obtained these protections from the cold wind, I climbed up beside the driver's seat. The big car darted off. My companion, I noticed, was without any such comforts. When his jacket blew aside, it was unbuttoned, I saw that he was not even wearing a waistcoat.

He was speaking, and I leaned closer to hear.

"It is not Planco. Say it like this, 'Plong-caw!'"

After several tries I enunciated the name to his satisfaction.

Another thought struck me. This man was obviously much above me in the social scale. Would my worn brown suit be good enough?

"Do you dress for dinner, Mr. Planco?" I asked.

"Dress for dinner?" His tone was puzzled. "Am I not sufficiently clothed?"

I had no answer ready for that.

The only other remarks worthy of recording occurred after we had gone a little further. Planco showed considerable impatience at our slow progress and continual stops.

"You handle your traffic in primitive fashion," he remarked, bringing the car up with a jerk.

"How do you do it in your country?" I demanded a trifle piqued.

"My country? I would be gratified if we leave the discussion of my country to a later opportunity."

The curtness of his words was belied by his slow utterance and his pleasant smile.

Planco's House

WE turned into a street where the houses were aristocratic and imposing. I was again conscious of my old clothes when we left the car and walked up to the door of a dwelling of unexpected magnificence, my legs desperately trying to keep up with the long strides of my companion.

As I surrendered my hat, coat and umbrella to the maid-servant, I glanced round the hall. It was large and well-built, with a high, decorated ceiling. There was an oak table, richly carved, with many silver ornaments. A heavy hat stand stood by a massive umbrella stand. The floor was littered with bearskins. Sketches, some humorous, some of landscapes, occupied every available space on the walls. In a recess was a switchboard, with telephonic connections for many rooms.

Other rooms, I found, were furnished in the same elaborate style. It seemed to me as though a furniture-dealer had been given the job of furnishing that house according to his own ideas, with no restrictions as to expense. The place must have been the answer to some furniture-dealer's prayer. I wondered if he had retired on the proceeds. His ingenuity in finding fresh unnecessary articles to fill up odd corners, sprung continual surprises on me.

"Make the acquaintance of my wife," Planco was saying, in the drawing-room.

This was another surprise. Mrs. Planco, as I naturally thought of her, was the most magnificently-built woman I had ever seen. Scarcely an inch shorter than her husband, her frame was broad and of immense power. In many ways she was like him. Her complexion was the same deathly white, her eyes as penetrating, of the same pale brown color, with that strange look about them I now saw to be due to abnormally large pupils.

"Pleased to meet you, Mr. Hammond," she observed. Her voice had a deep contralto quality of great richness.

Though an admirable woman in every way, she was singularly devoid of feminine charm. She seemed more a woman to work with, a collaborator or an enemy to be feared, rather than a mate to be loved.

The Dinner with Mr. and Mrs. Planco

THE meal, though elaborate and expensive, was somehow disappointingly ordinary. I do not know what I had been expecting, but the repast served up seemed to me too commonplace to be in keeping with the unusual appearance and ways of my host and hostess. Nobody changed. I noticed a certain awkwardness in their handling of knives and forks, and that they ate surprisingly little. Conversation was trivial, being concerned mainly with Mrs. Planco's enquiries concerning my life and work.

"Are you married, Mr. Hammond?" she enquired.

"No, Mrs. Planco. I was to have married about ten years ago, but she died of pneumonia."

Planco looked puzzled for a moment, but his wife spoke a few rapid words in a strange tongue, and his brow cleared.

The cross-examination made me feel that I was being treated almost as a child. It would have been embarrassing but for the extremely friendly manner in which it was conducted. Never had I met such agreeable people to talk to as my host and hostess.

After the meal we all adjourned into the drawing room. It was then that I experienced the first great shock of our acquaintance. I shudder now when I think of it. I was following behind those two, whose shoulders were well above my head, when we entered the room. It was in darkness. The man must have turned, his huge bulk a shadowy outline in the diffused light from the partly open door.

My host's eyes shone in the dark with a green glow like a cat's!

A wild fear possessed me. I thought of werewolves, of fiends in human shape. An abysmal terror of the unknown possessed me, and I screamed at the top of my voice, again and again.

"What is the matter, little man?" I heard Planco's soft voice.

The light was switched on, and all seemed normal again, those eyes pale brown as before.

Still shaking, I lowered myself into a huge armchair.

"Pardon me," I said. "Some strange trick of the light frightened me. My nerves are very bad, and I thought I saw something horrible. I have always been easily scared in the dark," I added with some truth.

Planco stepped outside to reassure someone who had come running up at my cries.

The woman placed a huge but cold hand on my knee, giving it a comforting grip.

"We are to blame," she observed. "It is an effect we always strive to avoid, but my man was momentarily careless in turning round before the light was lit, and produced the effect you saw."

He gripped my knee in the same manner, completely enclosing it.

The Secret Disclosed

"ALLOW me to tender apologies," he said. "I can readily understand the shock to your nervous system. I think," he turned to the woman, "that since our friend has unwittingly surprised our secret, we had better tell him the facts."

"We cannot well do otherwise."

"Well, little man, you must be prepared for some large surprises. I doubt, even with evidence before you, that you will believe all of it."

The woman arose. "I have one or two things to attend to," she observed. "I must go. I return later."

She was gone.

The man continued as though there had been no interruption.

"I sought your acquaintance, Mr. Hammond, for

several purposes. One was that I wished to study the economic, as you call it, structure of your society. Another was that I perceived in you a singularly alert intelligence, that offered more chance of congenial conversation than presented by any other man I have observed."

(From this point I shall edit Planco's remarks, and when he uses a word in what is not quite the right sense, I shall insert my own phraseology).

"You are very flattering," I murmured.

"I study your society, understand," he went on, "strictly from the standpoint of an outsider. I know nothing of the method whereby your masses are fed, clothed and sheltered, except what I have learned from you, and from tedious books that take a long time to read, longer still to understand, and give little information in the end. My wife and I have been sent here for the special purpose of studying your society at first hand, to discover how it lives, and how your social arrangements, that seem so impossible on paper, actually function."

Where Did They Come From?

WHILE he spoke I had been thinking rapidly. Where dwelt such beings as my friends? Mongolia? There was nothing Mongolian in my friend's features. An unknown race of Eskimos? Improbable. Thibet? Ah! That must be it. The little-known plains of Thibet. There dwelt this remarkable race. But why this curiosity about us? Were their objects friendly or otherwise?

"You need have no fear," he said, answering not my words but the expression in my eyes. "The intentions of my people are entirely peaceable, and only consist of indulging our scientific curiosity."

"What is your home? Thibet?"

"Very much further than Thibet. The distance is measured in millions, not thousands of miles. Kareem and I have made the journey from the planet Jupiter to visit this earth of yours!"

I must have made a picture of stupid astonishment at this amazing statement, for he smiled broadly.

"I have observed," said he, "that you appear to be suffering with some bacterial infection of the nose and throat, causing certain muscular spasms and noises. Am I right?"

"I have a slight cold," I admitted.

"Would you allow me to treat it?"

"What is your treatment?"

"The injection of one grain of this fluid," he held up a bottle he took from the desk, "into your veins."

"Is it perfectly harmless?"

"It is absolutely safe. It has been in use on Jupiter for five hundred years, and will cure any bacterial disease whatever."

I considered.

"I know nothing about your ways on Jupiter. What is this drug?"

He handed me the bottle, but the label was incomprehensible, and he took the little bottle from my hands.

"It reads, 'Essence of Life'," he interpreted, "and indicates the dose and method of injection."

Afterwards, it seemed strange that I should have consented so readily. I was very conscious of his eyes. Did he use a little of the hypnotic power of those orbs to beat down my resistance? Looking back, I believe he did.

The injection was a fairly long process. He asked my weight, stripped, which was 9 stone 5 lbs. From this he mentally calculated the dose, broke the seal of the bottle, and measured out a minute quantity with a complicated balance. Then he divided that into four parts roughly equal. With an unfamiliar instrument, he gave me an injection in each arm. After that he waited a few minutes, and asked if I felt anything. Except for a slight buzzing in my ears I was normal. I took another injection in the left leg.

A Severe Treatment for a Cold

A FEW minutes later the buzzing became louder. I do not remember the fourth injection.

A slight nausea came over me. Immediately after I wanted violently to vomit, but could not. The room began to spin rapidly around, making me giddy. I struggled hard to keep my consciousness, but felt myself slipping . . . I had been drugged or poisoned. . . .

CHAPTER II

Explanations

I LAY where I could hear a rushing noise, as of a cataract of water. This was the only thing of which I was aware. For a long time I listened.

Then I became aware of a dark sky in which floated a brilliant moon, three-quarters full, and the bright familiar stars. Their brightness hurt my eyes. From them I turned to the window that framed them. A picture of a little girl with a white pony hung in a heavy gilt frame beside it.

Planco and his wife sat side by side on a settee and talked quietly together. Memory came back abruptly. I was lying on a settee near a window.

"That was a powerful drug you gave me," I said, to draw attention.

Planco turned and rose.

"Ah! You have awakened. Lie still for a while. How do you feel?"

"There is a rushing sound in my ears. My senses seem unnaturally acute. And, I ache! Lord! How I ache in every joint!"

"Life is painful, little man. Much more so than death. Think of when you drew your first breath, cut your first teeth."

"Why have we moved from the drawing-room?"

"The sickness that always accompanies the first effects of injection was extra severe in your case. I mixed a sophorific with your doses, so that you slept

over the worst. How is your cold?"

I drew a deep breath. "My head is clear."

Jovian Voices and Music

"LIE still for a while and talk. Sit up when you feel better. We will play some of the beautiful music of your world to you, and then some of ours."

He stepped to a large electric gramophone that stood near, and selected a record.

The voice of Ponselle rang out, then that of Gigli.

I asked if tenors and sopranos were the rule on Jupiter.

"That is what your world possesses that we lack," replied Mrs. Planco (I mean Kareem).

"Our voices are deeper. We have contraltos, baritones and basses, but no high voices. The sweet high notes of your great singers, particularly the Italians, our race can never imitate. That is one thing your world can give to ours.

"Now listen to some Jovian stuff. I had great difficulty in adapting our machine to run by electricity, but I managed it."

She lifted an ebony box, about a foot square, on to the table.

A string instrument, rather like a 'cello, began playing a soulful melody. Suddenly, a bass voice of tremendous power gave a great shout, one note only. The 'cello continued. A marvellous contralto voice of great dramatic quality sang a phrase, a phrase of heart-breaking sorrow. The bass barked again. A baritone came in, and sang sweetly and softly, the bass joined in, more quietly than before. The contralto was heard, as though far away, very soft. Her volume slowly grew, till she dominated the others. They stopped abruptly, leaving her alone.

I never enjoyed music as I enjoyed that. The wonderful blending of voices, the innumerable instruments in the background, the passages of mournful beauty followed by passages of mad delirous joy, dropping suddenly to tones of sorrow that would bring tears from a stone, all took away my breath. Every voice had the tone of a Destinn, the power of a Chaliapin.

It ceased abruptly on a cry, as of despair, from the contralto, leaving me longing, craving for more. It must have lasted thirty minutes.

"The voices are great," I said. "What is it about?"

"There is no meaning," responded Kareem. "Just sounds set to music. Of course, it is impossible for one on earth to appreciate it properly," she added.

"Especially at the first hearing!" exclaimed the man. He leapt to his feet, and came quickly to me.

"How are you feeling now?"

"Much better!"

I rose. The blood seemed to course rapidly through my veins, making me exhilarated, joyful.

"What is this drug of yours?" I asked.

"We call it the 'Essence of Life.' It has the property of arresting putrefaction and decay in flesh. If you died now your body would take about four times as long to decompose as it naturally would."

"How much did you give me?"

"Just over a grain of the compound containing it, actually about one and a half per cent of a grain of the actual pure substance.

Chemistry on Jupiter—Life Duration There

"CHEMISTRY on Jupiter has advanced to a stage when we can produce remarkable results from very minute quantities of material. The essence, when injected, distributes itself among the atoms of the matter composing the living flesh, occupying the space between the atoms in the form of nebula-like clouds. These clouds offer a strong resistance to the forming of certain compounds.

"You do similar things yourself on a smaller scale. Vitamines, minute quantities of which make the difference between health and ill-health, work somewhat on the same principle. Catalysts, that promote certain chemical changes, do the same thing. This essence is a compound of the active principle of four different anti-catalysts we have discovered."

"How long does the effect last?"

"It is safe to say that it never entirely wears off, though the effect weakens. We have supplementary injections every twelve years.

"It is the most directly beneficial discovery ever made by science on Jupiter. The effects are much more far-reaching than you would at first imagine.

"Your whole life is a fight against disease, bacteria, decay. It is a fight that never ends until you go down in final defeat. Your health and comfort are regulated by the number of harmful organisms in your blood and in your flesh. When they are few, you are well: when they are many, you are ill.

"There are times when you feel exceptionally full of vitality. Your body is active, your mind clear. Hard work becomes easy.

"That is when putrefaction is in abeyance.

"Can you imagine a life that has completely won this interminable fight against disease, and lives continually in a state of vigorous health, compared to which the best days of your youth were a time of festering decay?

"The body grows in strength, the mind in clearness and capacity. With your thorough content and energy you seldom experience emotions of greed, anger or jealousy. You are free to develop the wonderful possibilities of your brain and body to their utmost limit, free from the crippling struggle, and with centuries in which to complete your development and knowledge.

"How old would you say Kareem and I were?"

They appeared about thirty, but I hazarded fifty years.

"We are both of us over four times that age," said he.

"Before the discovery, the average life-span of our people corresponded to about eighty of your years. Now, we often live beyond three hundred. Our bodies and brains continue developing most of that time, grad-

ually more and more slowly. My mate and I are in our prime at two hundred years."

"What is the limit to your lives?"

Kareem spoke.

"We find that at two hundred years or thereabouts we become stationary. At two hundred and sixty, varying slightly with individuals, we begin to go downhill, our brains gradually losing their power, until at three hundred we are but shadows of our former intellectual selves. Then most of us prefer to end our existences on this plane.

"Consider what this means. All people under eighty years old are children to us. The business of mating and bringing children into the world is done by us before we are fully grown up. Thus, we are left free to do our life-work unhampered by troubles of family and children, with Nature's age-old urge for reproduction in abeyance."

A Discussion

A THOUGHT that had been vaguely present in the back of my mind suddenly took shape.

"Leaving that for a moment," I said, "there is another question I should like answered. How do there come to be human beings on Jupiter? Did they come from earth in the distant past, or did the races of earth spring from Jupiter?"

"Neither," responded Planco. "Humanity evolved on each planet separately."

"Did life start in the same way on each planet?"

"Precisely."

"Then tell me this. If life develops on earth and Jupiter, millions of miles apart, through countless millions of years, each planet totally separate and distinct from the other, how could each produce the same result? There would be differences of climate, a thousand different influences. It is one chance in millions that similar races would evolve."

At this conundrum both smiled gently.

"You do not understand life as we do," observed Kareem. "Take two maple-tree seeds. Both are planted, but are subject to different soil and different climates. They will grow into very similar maple-trees."

"The cases are not parallel," I objected.

"More so than you think," she replied. "Have you ever examined the embryo of a tree, or, say, of a dog or a human being under a microscope? And can you show me the difference between them that makes one grow into a man and one into a tree?

Incomprehensibility of Life

"THE matter has never been explained, to my knowledge."

"Even with the super-microscopes of Jupiter, that can make atoms visible in detail, we are still unable to solve the mystery. No one can tell what makes each grow into its predestined form, inheriting even the qualities of its parents. Life proceeds by a process, incomprehensible to us, of unfolding from within, modified, perhaps, by external influences, but not determined by them, always determined by the form it was fated from the beginning to take. How do you account for the development of the different forms of life from a common starting point?"

"We believe in a theory advanced by Charles Darwin," I replied. "He maintained that the influence of circumstances, operating through what he called natural selection, and the survival of the fittest, gradually produces modifications resulting eventually in the differentiation of species.

"Imagine a race of brown-furred foxes, inhabiting a wide and warm country. One half of that country experiences a change of climate, and the ground is covered with snow. On that half of the country brown fur makes the foxes conspicuous to their natural enemies. The whiter the fur of any fox, the greater its chance of escaping destruction. Gradually the surviving animals, by inter-breeding, become whiter. Nature suddenly introduces a "sport," a fox that is pure white. That fox is sure to escape and breed, and some of its litter will be white. In time that particular strain will develop until it covers the country, and brown foxes will be extinct. Meanwhile, in the warmer half of the country, white fur is very noticeable and sure to lead to destruction. So you see two races, one brown and one white."

"That is very clear. Have you no other theories?" It was Planco that spoke.

"Mendel made some important discoveries in the manner in which characteristics are transmitted from parents to off-spring. He crossed tall peas with dwarf peas. Some of the product were tall, and bred as though they had never a dwarf parent. Others were dwarfs that also bred true. The majority, however, were intermediate, so there were produced some true tall peas, some true dwarfs, and the rest intermediate. This is true of all life, so that a man may inherit qualities from the grandparent, or great grandparent or more remote ancestor that the intermediate generations are apparently innocent of."

"That is true of life on Jupiter," said Kareem.

"Of recent years," I added, "there has been some departure from the materialistic view of Darwin. Some scientists hold that evolution is not entirely the result of chance. Constant effort towards improvement, though sub-conscious, might be a determining factor in producing modifications making for survival, and, over the ages, produce new species. The old dogma was, 'There is no inheritance of acquired characteristics'! but nobody can say that acquired characteristics, repeated generation after generation, might not have an effect on inheritance."

"That is nearer the truth," Kareem responded. "Yet, I tell you that the first form of life on your globe, the first faint stirrings in the primordial slime, contained within themselves in embryo, the highest forms of life to which, they would undoubtedly develop!"

"And the highest form man!" I exclaimed.

They smiled at each other.

"No," said Kareem.

A Revelation

AT some time during our talk refreshments, liqueurs and cigars were brought in, and we all partook. The hour was growing very late, but I was too interested to leave.

"Man," remarked Planco, after a while, "is but an incident. There are higher forms of life."

"On Jupiter?"

He did not answer directly.

"The truth is this," he continued, "man on Jupiter is little developed beyond what our preparation would make of earth men. This 'Essence of Life', to which we owe so much, is imperfectly understood by men. Though we have many men and women who have given their lives to the study of it, we can neither produce it in usable form or fully understand its operation. It is as incomprehensible to us as speech to a day-old child. Yet no effort is made to conceal it. We know that it involves the arrangement of atoms in molecules in four dimensions, that it is in some way a product of interatomic life, but we know little more than that."

"How, then, do you obtain your supply?"

"The Masters make it for us."

I asked the obvious question.

"The Masters are a form of life, as much more intelligent than human beings, as we are more intelligent than a cat." He nodded toward a big Persian, curled up by the fire. "Yet we are not hunted and destroyed by them, but live with them amicably. Oh, perhaps it would be better to say, they tolerate us as pets, as domestic animals, much as you do with dogs, cats and horses."

I shuddered. "What a terrible fate for the proud human race!"

"We do not think so. Some of us become greatly devoted to our individual masters, though it is difficult to see what use we can be to the all-powerful ones. They are very humane and gentle, and have made poverty and want unknown amongst us. Kareem and I have seven children and many hundred descendants.

"These creatures, what are they like?"

"We are forbidden to tell you. When the Masters learned of our wish to come here, and arranged for our inclusion, they told us we must tell men of your world nothing of the Masters beyond the fact of their existence.

They made it clear that a race of Masters might even now be developing on earth, and to reveal its incipient power might result in a determined effort of humanity to stamp it out, resulting in a set-back in evolution of thousands of years. All this was told to Kareem by our particular Master, without a sound or movement, by telepathy.

"Were we to break his command he would know by the same method."

Planco Indignant

"IS there no way humanity can throw off this yoke?" I asked. "Perhaps, with assistance from earth with armies and guns——"

That was the only time that I ever saw the emotions of Planco break through his great dignity.

He sprang from his settee, and towered over me, bellowing in his bass voice, "Little fool of fifty summers! Know you——"

A sharp word from Kareem checked him, and he recovered himself instantly.

"I forgot," he said, "that you see these things differently from us. You cannot understand how obscene and traitorous such a suggestion appears to a loyal Jovian. The words of the Master are very true. He said, 'We shall find a race of men, lustful for power for its own sake, always ready to quarrel for the sake of quarrelling. They fight among themselves and slay each other by the millions. The council have often talked of wiping out the whole disgusting brood, though the humanitarian majority are against it. It is argued that by careful selective breeding and developing, and, above all, by the help of the Essence of Life, they might develop into quite unobjectionable and even pleasant creatures, like the domesticated men of Jupiter.'"

I had no reply for this astonishing attack. These creatures were abject, servile. Perhaps, amongst the masses of his people, amongst those classified as "average" or "sub-normal" there exists a group ripe for revolt.

A glance at the clock showed me that the hour was even later than I supposed. Leaving our discussion at that point, I rose, and announced that I must depart.

"You will come again?" asked Planco. "We have much to talk about. We should like you to spend several days with us."

I thanked him, and named a date a month ahead.

Kareem drove me back to my apartment, where I slept and dreamed of men as big as houses, with glowing green eyes, who chased me, sometimes on foot and sometimes in Gargantuan cars, for the purpose of taking me to Jupiter, where the Masters wished to inject me with the Essence every week and see if I lived forever.

CHAPTER III

The Space-Ship

IN the clear light of the morning my over-night adventures seemed more incredible than they had in the evening. I wondered whether the green light in those eyes were some queer conjuring trick, the injections I had experienced merely some drug producing temporary unconsciousness. The test would be whether the benefits I had been promised would follow.

My cold was certainly gone. My breakfast I digested without any of the usual discomfort; and my bodily functions proceeded naturally without any assistance

from the various medicines I had previously resorted to. At the end of a week I felt much better, fitter and happier than I had previously been.

As the days passed I lost my first reluctance to visiting my strange friends again, and began, indeed, to look forward to the experience.

The day before I was due to see them again, Planco rang me up on the 'phone to ask if I wished to come, and what time would be convenient. I answered 10 a. m., and at the appointed time the Rolls Royce drove up to take me away.

My friend's huge figure stepped out, shook hands, and he said,

"I propose, before going to my temporary home, to take you to see the space-ship. Does that meet with your approval?"

I replied that I should be delighted. Although there was considerable evidence, I still found it difficult to believe that travel to and from Jupiter was actually possible. Therefore, I still had some lingering doubts of the truth of Planco's story, and would be glad of proof.

"You shall have proof," was all he said.

This time I was requested to enter the vehicle instead of sitting beside the driver. Planco drew the blinds, and remarked that he trusted me not to raise them. An efficient little telephone was installed for communication with the driver. For the most part I sat and speculated, using the phone only for an occasional remark.

The speed we maintained was sometimes alarming. I could soon tell we were in the open country.

After perhaps an hour, we left the smooth surface, and turned along a rougher thoroughfare. A few miles more, and the car pulled up. The blinds went up of themselves, and I saw a pair of huge wrought-iron gates before us. At the sound of our horn, a red-haired young man, obviously a gardener, emerged from a lodge at the side. One glance at us, and the gates opened.

We ran along a broad gravel drive.

"Our young friend," remarked Planco, "is but forty of your years old. He was keen to come with us and perform some of the simpler tasks, but he is slow in learning the language. As he is but five foot ten, he can mix with earth folk without exciting much comment, though he is considered locally as rather a fool."

The Abode of a Master and the Space Machine

A LARGE house showed through the trees.

"That is the Master's residence here. You see that it has large grounds, where many things may be hidden."

"Is there a Master actually on earth?" I asked in surprise.

"Yes. He lives here with fifteen personal helpers and servants. A few others are scattered about Europe and Asia, investigating personally, like Kareem and myself."

We took the left-hand path at a fork, leaving the house behind us. About a quarter of a mile we went, until, breaking suddenly through the shrubs, we found ourselves in a wide expanse of carefully-tended grass. In the centre was a huge machine I realized at once to be the space-flier.

It was about two hundred yards long and eighty wide, shaped rather like a rowing-boat balanced on its keel, resumably by gyroscopes. Landing-wheels were close to the keel. There were two propellers; one monstrous thing with six vanes stood idle on top, while a similar smaller one was in front. There was a rudder behind. The whole thing was a vivid green in color.

"Do your propellors work in ether?" I asked.

"They are only used for landing on or taking off from a planet with an atmosphere. Where there is little or no air, we should use rocket tubes, but they are more difficult to operate for that purpose."

A door swung open, we ran up a gangway into the ship, and I alighted to make my first and only examination of the space-ship.

In the Jovian Space-Ship

A MAN even taller than my guide met us. His hair and beard were a flaming red.

"Greetings, Mr. Hammond! I have instructions to show you over my little barque!"

Then I was expected! I decided to say nothing, show no surprise, and suffer myself to be led about.

The interior was divided into many rooms, lofty and spacious. The floors were of some spongy rubber-like material into which one's feet sank. Our footsteps remained behind us as though we stepped on wet sand, slowly filling in like some thick viscous fluid. It was very soothing to the feet.

On the walls were pictures showing unearthly but beautiful landscapes. Some of these had been turned to the wall. There were many tables, perfectly round, balanced somehow on one leg, and seemingly made of polished ebony. Arm-chairs were everywhere, solid blocks of the rubber-like material that composed the floor, but not cold to the touch.

Some rooms were obviously bed-rooms, and these contained beds that were solid blocks of the same stuff, without head or foot.

"Try it," suggested Planco with a smile, seeing me examining one of them.

As I did so, I seemed to float, without weight, on a mass of cloud. Dreamy sensations came over me, and in a very few minutes I should have sunk into a deep sleep.

When I rose the shape of my body was deeply impressed on its yielding surface. This, I thought, explains Planco's many armchairs and settees. Used to such comfort, the best upholstery must seem unmercifully hard.

There was an immense library that contained representative works on all the sciences. Idly, I looked for

my own. Every one was there. I was a little surprised to find that I had written so many. A complete shelf was allotted to me, whilst many eminent authorities were confined to three or four volumes. My cheeks burned as I left that room. . . .

I inspected the rocket-tubes, which were surprisingly small and simple of construction.

"You must need a lot of fuel," I observed.

"About two tons," said our guide, who was, under the Master, the commander.

"Does that trifling amount take you all the frightful way to Jupiter?" I exclaimed.

How the Ship Was Propelled and Stopped

"WE can eject it at almost the speed of light, and little bulk is required. Moreover, the material of the ship itself could be used if necessary. The tubes, however, are only used for emergencies; we do not obtain our motive power from them. If you will come this way I will show you the driving mechanism."

He led the day to the machine room. It was a vivid contrast to the huge motors and engines I expected. In a space thirty feet each way stood a six foot high brass-like cylinder, connected by a stout cable to a machine resembling an X-ray apparatus. There were a number of glass tubes, several wheels at different angles, and a seven-foot brass tube, a foot in diameter tapering to six inches at the free end, that could be pointed in any direction except downwards. There were also many levers and dials.

"The yellow cylinder contains an atom-disrupting machine. It is controlled by this wheel, and will give almost any amount of power required. The machine in front is really simpler than it looks, and is in principle a powerful electro-magnet. It sends a beam of tremendous magnetic force in any given direction. Most of the instruments and levers around are for controlling the direction, strength and polarity of that beam, showing where the ray is impinging and the strength of the force pushing or pulling the vessel.

"Now, if you have any further doubts, Mr. Hammond, we will take a little trip into space and back."

"Really, I am quite convinced." The prospect of leaving the solid earth rather frightened me.

"It will only take a little while, and will be perfectly safe, I assure you."

Would the vessel really rise? To know the truth I must conquer my fears.

"Very well," I said. "Just beyond the atmosphere and back."

"Have you anything magnetic, or likely to become magnetic in your possession? Keys, steel, pins, or a watch with steel springs? If so, put them in this insulating box."

"Our little friend had better strip," interposed Planco. "The buttons of his vest or pants may contain iron. I will get him something to wear."

He departed, and returned with a thin light dressing gown which he said belonged to our young friend at the gate. When I put it on, it swept the floor. Planco corrected this by means of a belt, then produced a pair of rubber slippers that shaped themselves to my feet.

Feeling rather ridiculous, I sat in an arm-chair, while the others did likewise, the controls being operated from a sitting position. A low hum arose; the tubes glowed violet; but nothing else happened.

Just as I was expecting them to confess failure, I glanced out of a circular window. The ground was dropping away from us!

The clouds came down, the sky lost its blueness and became black. At our rapidly increasing speed we soon reached the point where the stars shone clearly at two o'clock in the afternoon.

Some Jovian History—The Picture

I WENT down in a lift to look at the receding earth. The outlines of North America showed clearly, the snows of Northern Canada shining with blinding brilliance. A violent storm raged over the Atlantic. We hung, weightless, over it all.

"The power has been turned off," remarked Planco. "The attraction of the earth will gradually overcome our momentum." He went away to the lift.

Now was my opportunity! Quickly, I stepped to one of those pictures that were turned to the wall. It was unexpectedly heavy, and the manner in which it was attached puzzled me. Impatiently, I wrenched at it, causing it to fall, slightly injuring my left foot.

In a field of luxuriant pale-green grass stood a man and woman, completely nude, talking together. An octopus-like creature with eight-foot tentacles stood beside them, but they showed no fear of it. A complicated machine with other figures around it, stood in the background. Everybody had bright red hair, and the men bright red beards. Trees and flowers were scattered about.

I had only time for a rapid glance before I heard a hasty step and turned. Planco stood in the doorway, gazing at me with infinite reproach. . . .

He said no word, other than "Come along!" and led the way to the lift. Exultant, yet strangely ashamed, I followed. Had I seen a picture of one of these elusive masters, or was the octopus merely in captivity? Was the picture hidden because it showed a master, or because its details might offend my sense of decency? Whether or not Planco reported the matter I never knew, as no word was ever spoken about it.

The whirring propellors let us gently down to our exact resting place, where we remained, mysteriously balanced as before.

As Planco drove me away, now restored to my normal dress, I broke the silence by asking him why the machine should be green.

"To be less conspicuous to airplanes against the lawn. The color can be regulated. Our temperature when in space is controlled by the color method, determining how much of the warmth of the sun's rays shall be absorbed on the one side, or radiated away

on the other. Alternately, our atom-disruptor can give us all the heat we want, or freeze us if we wish."

"Is there much danger in the journey?" I asked.

"There were four failures before a successful journey was made to the earth."

"What happened to those four?"

The History of Interplanetary Travel

"I WILL give you the history of interplanetary travel in a nutshell. Three hundred of your years ago, the first experimental space-ship rose above the confines of our atmosphere, intending to make a circuit of our globe and return. It contained one master and two men.

"After a few hours they sent back the message that they were experiencing ill effects from some unknown rays from the sun, which rays appeared to pass readily through the hard metal walls of the vessel. They might have returned at once and recovered, but they chose to remain and make a complete analysis of these rays. Finally, they set the controls of the vessel to bring it down automatically into the atmosphere, where other vessels recovered their dead shrivelled bodies, and their findings.

"Having a complete list of these rays, our scientists were soon able to devise an insulating coating. The second journey was entirely successful, no harmful effects being experienced.

The Fate of Early Space-Ships

"IT was twenty years later before any attempt was made to venture further out. The first bold voyagers, two masters and ten men, travelled towards the earth apparently quite successfully for about eighty thousand miles. Then they appeared to leave their course. They sent back, asking for their bearings; but attempts to direct them only resulted in their getting further and further away from both earth and Jupiter. Finally, their air or food exhausted, they settled down to a perpetual orbit round the Sun.

"Two other vessels met with a similar fate.

"It was believed that some force or attraction drew the ships off their course. A very powerful ship was built, with enormous rocket-tubes and a large supply of fuel, its purpose being to travel one hundred thousand miles and return. It travelled as erratically as the others, but was finally successful in returning to Jupiter.

"The story they told was this. After they had gone a certain distance, headed for earth, they found that the distance to that planet became stationary. Thinking they were under the influence of some other body, they increased their power. Earth was now receding although their instruments and their senses assured them that they were headed directly towards it.

"Then the master spoke.

" 'Gentlemen and fellow scientists,' he said, 'it is as I feared. Out here our course is complicated by fourth and even fifth dimensional factors that cannot be entirely comprehended, let alone worked out, by me, the leading mathematician of Jupiter. Successful space-navigation is forever impossible. Stop the power and let us drift. If we cannot ourselves get back alive we may be able to ensure that our machine will, with the story of our discoveries.'

"As I have said, they did get back, after nearly a year of tortuous navigation. They fired tubes blindly, and noted whether that brought them nearer or further from Jupiter. If further away, they tried the opposite direction, though at times they seemed to fire almost straight at Jupiter.

"That seemed final. Some forty years ago, however, one of our scientists came forward with a new proposition. Suppose a ship were guided by the actual attraction of the body to which it was intended to travel, it would not be necessary to calculate the required direction. He succeeded in perfecting a powerful beam of magnetic force, that could be given a North or South polarity, as required. He directed this at the corresponding attractive magnetic pole of the earth.

"His ship traveled in what seemed an erratic spiral course, but observers on Jupiter said that it described a fairly regular arc to its goal. He did not land.

"Our larger ships were then built for purposes of exploration, and made the first actual landing."

I drew a deep breath.

The Martyrs of Jupiter

"YOUR race has admirable qualities. Neither masters nor men appear to hesitate to give their lives in the cause of science."

"We are all prepared to sacrifice ourselves that knowledge may advance. We number our martyrs by the thousand. How many lives, would you think, were lost before the 'Essence of Life' was perfected?"

"I cannot say, I suppose a great many."

"Fully four hundred and eighty, and cripples and freaks innumerable. You see, the trouble was to find the exact dose required. Too little leaves some part of the body unprotected, and disease at once attacks that point. It rots almost before one's eyes. Too much also concentrates in one point, producing first abnormal growth, then cancer. Other difficulties were to find the exact proportion of the different ingredients required, and a suitable medium in which to inject it."

While we talked over that neat little telephone, that fitted over one's head, and was as easy to use as though one were talking to some one by one's side, the powerful car took us back, smoothly and without incident, to Planco's home. Soon, I was indoors, and talking to the charming Kareem.

CHAPTER IV

I Go to Meet the Master

THE next few days passed with little incident. I delivered many informal lectures on society, our system of government, education, and the four

sources of income; labour, rent, interest and profit. The greatest difficulty was explaining currency and the nature of interest.

It must have been about a week afterwards, when the incident arose that led to my last adventure, and ended in landing me in such an awful dilemma.

We had been discussing in the drawing-room, the "Essence of Life" and its benefits, when I suddenly resolved to make a plea for humanity.

"You have been good enough," I began, "to allow me to participate in the benefits of your world's great discovery, the 'Essence of Life.' I already experience a great improvement in bodily health and fitness as a result; no doubt the increase in mental power you promise will follow.

"Why not give my people a little assistance in our upward struggle? Let my people as a whole experience the benefits of your drug? It would mean so little to you, and so much to us. No doubt we could find some way to recompense you."

The idea expanded in my brain.

"Many benefits might spring from association between the planets. Commerce, trade, exchange of ideas and visitors could take place."

I addressed my remarks to the man, but the woman answered.

"Jupiter is interested only in the advancement of life, of intelligence, and would seek no reward, were you capable, which I doubt, of making any return. How would you propose to give the people the benefits of the preparation?"

"Announce in the Press your discovery, write to the leading medical men of the day prescribing it, and demand an investigation. Produce witnesses, hopeless invalids made fit and well by your method."

"They would demand our credentials," she objected, "ask for our medical certificates, and, when we failed to produce any, denounce us as unqualified quacks, perhaps have us arrested!"

"Why not get a qualified doctor (my brother, James, for instance) to lend his name to the movement? Advertise our treatment and make a high charge for it, so that notice would be taken of it. Every patient would be a propagandist. In time the very number of people acclaiming us would compel governments and scientists to recognize the treatment!"

"You have reasoned it very well. Without doubt, it could be done. Were Jupiter convinced that it was for the benefit of your race no difficulties would stop us.

The History of War

"THIS matter is the great controversy on Jupiter. Would it help you or not? Remember the character of your people and their destructive wars. I remember watching your globe during the Crimean War, by means of a telescope that amplifies light as you amplify radio messages. The great masses of people engaged in destroying each other puzzled me. 'They are always at it!' the operator told me, with a shrug.

"Suppose that some, shall we say, acolyte of ours, were to turn his developed brain to discovering fresh engines of war? There are many deadly rays, many forms of poison gas, many devastating weapons he could devise. Perhaps your whole race would perish in some universal holocaust.

"The non-interference party on Jupiter point out this danger, and argue that it is fatal to interfere with the course of Nature. Your people must be left to develop on their own lines, by the universal process of unfolding from within, following their own tendencies and laws, without outside interference."

"But, surely," I objected, "by carefully avoiding the treatment of anyone likely to make such discoveries until there were sufficient people developed broad-minded enough to make war an impossibility——" I stopped.

Kareem reflected.

"This matter has been the subject of heated discussions amongst the Masters for generations. There are three parties. One, a minority, thinks much as you do. The great majority are for non-interference. There is also a small group in favor of the annihilation of the earth people.

"It was mainly to decide the vexed question that the expedition, of which my mate and I are part, came here to investigate conditions on this globe. However, your remarks have raised a question my man and I cannot answer on our own responsibility."

As she spoke, Planco rose and went out.

"My man goes to report to the Master. We inform him of everything of importance."

But a few minutes elapsed before Planco returned.

"My friend, the Master says he would like to discuss the matter with you personally!"

"At once?" I cried.

"Yes. We can go in the car now."

My brain whirled. "I would rather wait a little before facing such an ordeal."

Planco rose and stood looking at me. His eyes held, fascinated me. I seemed to float, helpless, in those pale brown depths. My limbs were rigid, beyond my control.

As though from a distance I heard his voice.

"I am sorry to inform you," he was saying, slowly, "that the Master desires your presence at once."

Helpless in that mesmeristic power, my will seemed carried away like a twig in a flood. Like an automaton I rose and followed to where the car was waiting by the curb.

A Voice from Afar

ONCE more master of myself, I sat in the car and traveled at furious speeds without knowing where I was.

"Forgive my method of bringing you," the telephone was saying. "I had to fetch you, and, although I knew a little persuasion would soon have overcome your re-

luctance, I am impatient. Your slow brain is a little trying at times. However, you will find the Master much more patient than I am."

Little more was said, and we finally drew up, as before, at those huge iron gates.

This time we went straight to the house, where a red-haired, obvious Jovian admitted us.

I was conducted down a passage and entered a room on the left.

It was large, and on the floor was a thick warm carpet, while around were many arm-chairs and settees. One wall was occupied almost entirely by shelves containing books. No attempt had been made to arrange them in sizes. To one side was a roll-top desk, before me a dining-table and chairs.

The only objects in the room that were remotely unearthly were a number of contrivances that stood about as if they had been carelessly dropped there. One might have been taken for a new model of a gramophone: another for a futurist conception of a radio receiving set: another might have been a new combined typewriter and calculating machine, rather more complicated than any at present on the market. They all plugged into the wall and connected by an inch-thick cable that ran under a thick curtain that hung from ceiling to floor at the end of the room.

One of the tall men entered, and murmured something to Planco, who turned to me.

"The Master says that he regrets that it will be unavoidable to keep us waiting for about half-an-hour. Meanwhile, he will entertain us with the gramophone. If you wish for any particular drink or any particular brand of cigars while we are waiting, Tibard here will get it for you."

I thought for a moment, then named champagne and a particularly expensive brand of cigars as a test. In a few moments Tibard appeared with both.

That half-hour passed very comfortably, sharing the drinks and smokes with Planco, and listening to the life-like music of Jupiter, coming from some hidden source.

"When the music ends the Master will speak," said Planco. With a draw on his cigar, he leaned back, closed his eyes, and gave himself up to voluptuous enjoyment. Every mood of the melody was mirrored on his features.

The performance ended on a note of melancholy. I waited, expectantly.

"Welcome, man of earth!"

The voice appeared to come from a black ebony box on the table.

The Interview and My Plea to the Master

"I AM sorry to have kept you waiting," it went on, "but certain necessary adjustments had to be made. I also regret that my servant used such an untactful method in bringing you. The importance of the occasion makes your presence here imperative, but such a way should only have been used as a last resort.

"You need have no fear of anything or any one in this house. No harm of any sort will come to you.

"You are Joseph Hammond, a fully-grown male inhabitant of New York, one of the principal cities of the planet, earth. Is that so?"

"That is so."

"Your writings have been read by the scientists of Jupiter, and we have sought you out to be the spokesman of your people, because we consider you the world's greatest authority on its own social organization. Also, you are free from political prejudices, and well fitted to judge the effect of far-reaching innovations with a strict impartiality."

This singular mistake surprised me considerably. I am an obscure unknown man. However, I include this remark, otherwise my narrative becomes unintelligible. No eyes but mine, and perhaps James', will ever read these words, so that no harm will be done.

The voice went on.

"I am talking to you as a representative of the rulers of Jupiter.

"Joseph Hammond, you are here entirely of your own free will. If you wish to depart, Planco will at once take you back in his vehicle. You need have no fear in remaining. Do you wish to remain?"

"I do."

"Then we will proceed. First, to satisfy your curiosity, I am conversing with you by means of a machine of my own construction that reproduces human speech. It will speak any modern earth language, and was designed mainly with the object of showing the scientists how Earthmen communicate with each other.

"You have already been instructed in the principal facts concerning Jupiter and its inhabitants that are of interest to a man of earth. You have personally experienced some of the benefits of our preparation, the 'Essence of Life.'"

"That is true," I said, wondering that I had so little talking to do.

"Those, then, are the facts. Now, Joseph Hammond, consider carefully. Do you think that a wholesale application of the treatment would be truly beneficial to men of earth, and would it aid them in their intellectual advancement?"

"I am sure of it," I cried.

Wars on Earth

"A CALM consideration of all the facts, and not emotional statements are essential in matters of such importance," rebuked the machine, coldly. "Remember that your history is known to us. Between the years 1914 and 1918 a disastrous war was waged amongst the people of earth, nearly every inhabitant being involved. Well over a million were killed, directly or indirectly.

"To-day a large proportion of your males are trained in the bearing and use of weapons, with readiness for war as the business of their lives. A large proportion of the resources of earth are expended on the produc-

tion of weapons. Today there is fighting in China, Northern Africa, and other places. Spasmodic outbreaks involving repression by force occur in nearly every country on the globe. Is this true?"

"Partly," I answered. "But it is in the power of Jupiter to alter that. Among my people are many broad-minded men and women who seek to abolish war and strife, and bring about universal peace and brotherly love. An increase in the standard of intelligence would inevitably give force to this movement. Fear and hatred are but products of ignorance."

"Would it not rather be like giving lethal weapons to children playing in a nursery?" he replied. "They would blow each other to pieces in the first dispute that arouse, because they would not realize the deadly nature of their arms."

"Not if you increase their intelligence so as to make such disputes impossible."

"The experiment would undoubtedly be fraught with frightful risks. You must realize that while our preparation certainly increases mental and bodily powers to an enormous extent over a course of years, there is no guarantee as to how that power will be used. You have many persons on your planet who are criminals. Daily you read in your papers of thefts or murders by such social misfits. You are compelled to keep up a considerable force of police to check the activities of these persons. Suppose one of them became treated over, say, four periods of twelve years. He might easily become a serious menace to society."

"A careful selection of subjects," I suggested.

"There would always be the possibility of mistakes, and one mistake might have frightful consequences."

A Hopeless Case and My Awful Mistake

I FELT that my case was hopeless, already decided before I began my plea. In despair, I turned to Planco. His sympathetic smile soothed me, but he offered no help.

At the same time, he gave me an idea. I clutched at it before it was properly formed, and hurled it half developed, in triumph at that ebony box, as I realize now, much, much too quickly.

"You have met those difficulties before," I cried. "Were not the men of Jupiter in a backward state when you first introduced the drug to them? What you have done before can you not——" I broke off. A realization of my awful mistake was beginning to dawn on me.

Planco gazed at me in profound astonishment.

After a silence that seemed to last an age the black box spoke again.

"You have introduced a new idea into this controversy, and one that must be carefully considered. Go now, and I will communicate with you in the morning."

The Master Departs—His Missive

THE emotions of the debate, and of its unexpected turn at the finish, left me weak and dizzy. I returned in the car, but scarcely noticed the no-doubt excellent supper that Kareem provided for me. When I retired to my luxurious bed, I fell straight away into a deep sleep, assisted, I suspect, by some sleep-producing drug that Planco had secretly administered.

In the morning Planco entered the room.

"The Master returns to Jupiter to-day," he said, "taking with him his personal servants. Kareem and I and some others remain to complete our studies, and will follow later. This letter is for you."

I opened it.

It was written in a firm, perfectly formed script, produced, I could not help thinking, by some machine like the speaking machine. It read:

"My dear Hammond,

My mission on earth was completed by our interview yesterday, and I return to-day. Our talk was transmitted as it occurred to a committee of the three leading scientists of Jupiter. You are accepted as the spokesman of your race. The decision of the committee is this. If the drug is to be administered to the people of earth in bulk, representatives of the ruling minds of Jupiter must be here to take charge. All government will be taken over by them, and the earth will thereafter be ruled by them.

"It is recognized that time must be given to you to decide whether or not you agree to these terms. Planco and Kareem will remain on your planet for one year. You may communicate your acquiescence or otherwise to them, and Jupiter will act accordingly.

Karsillak, representative of Jupiter."

The letter left me dazed. I handed it to Planco, who read it.

The Answer to the Missive—A Sad Contemplation of the Future

"THIS is a matter," he said, "between you and the Master, in which it would be presumption for me to intervene. If I may give advice, drawing on my personal experiences, I should unhesitatingly recommend you to reply 'Yes.'"

Kareem agrees. But would the bulk of my people?

Such is the dilemma in which I am placed. I have still six months in which to answer.

Never was man set such a problem! I am to answer for the whole human race this awful monstrous question. Which course am I to choose? On the one hand, health and prosperity undreamed of, an end to all internecine strife: on the other, servitude and bondage, a hopeless slavery against which my soul and that of the whole race revolts.

It is too much.

Not the least in my problem is the thought that whatever I do I am probably only postponing the inevitable, or hastening it. In my bones I feel that sooner or later my people and these beings must meet and clash, perhaps in some awful destructive war between Earthmen, only a few generations removed from wild Nature and her perpetual struggle for existence,

(*Continued on page* 455)

The Pellucid Horror

By B. F. Ruby

THIS may be defined as a story of the pineal gland, to which all sorts of attributes have been given by the medical world—some quite fantastic; and in this story the gland, no larger than a pea, plays an all-important part in the plot. We are sure that our readers will enjoy this somewhat exciting narration.

Illustrated by MOREY

A POLICE reporter on the *News* for twelve years, I had acquired a certain mental toughness, a hard-boiled attitude in the presence of horrors, a swaggering manner that seemed to say that stranglings, throat-slashings and such like were old stuff to me. It was therefore with my usual blasé manner that I entered the examination room of the coroner to view the corpse of Wyndham Severance, though the details of the wealthy young man's demise, as I had heard them, were disturbingly strange. Nonchalantly I strolled up to the surgeon's table where the body lay and joined the group of interested listeners.

The Strangest Case of Suicide in History

CORONER DUTTON paused in his discourse to greet me. "You'll be interested in this, Guthrie. It's apparently the strangest case of suicide in history. The man choked himself to death with his own hands. You can see the marks on his throat still."

"Any witnesses?" I inquired.

"Only the butler who saw it from an upper window fully two hundred feet from the spot on the sidewalk in front of the Severance mansion where the strangling occurred. The butler thinks Severance had some kind of a fit. Says he could see Severance writhing about for all the world, as if he were struggling with some one, though he was quite alone. He seemed to sink or fall to the sidewalk and when the butler got there he was dead."

As I listened a chill of horror prickled my scalp. While Dutton had been talking I had been staring at the corpse. I had noticed something that had escaped Dutton's eye. It was something about the finger marks on the dead man's throat. . . .

Dutton noticed my excitement. "What's up, Guthrie?" he inquired sharply.

I drew him aside from the others. "Dutton, there's something peculiar about this. I'll tell you later what's in my mind. But now I want you to give me permission to let Merton Thorpe in on this."

It was Merton Thorpe's fate to be dragged from the preferred seclusion of his laboratory at Foster University to scenes of violence. In the scientific world his brilliant researches in biological chemistry were regarded with high respect. The man in the street, however, knew him as a romantic figure—the man who had solved the celebrated Molineaux poison case, and that of Madame Claire, the "death bride," which had filled the newspapers for months.

Merton Thorpe, the Biological Chemist

THE Coroner readily assented to my proposal and half an hour later the three of us stood again at the table where Wyndham Severance lay. I had told Thorpe what I had noticed about the finger marks on the dead man's throat and it was at these that the scientist looked first. I reflected as Thorpe stood there that his physique was that of a full-back rather than that of the traditional scholar. He towered above Dutton and myself, and his great leonine head rested on massive shoulders. His arms and hands were those of a blacksmith, and now I noticed he had placed those powerful hands upon the dead man's throat.

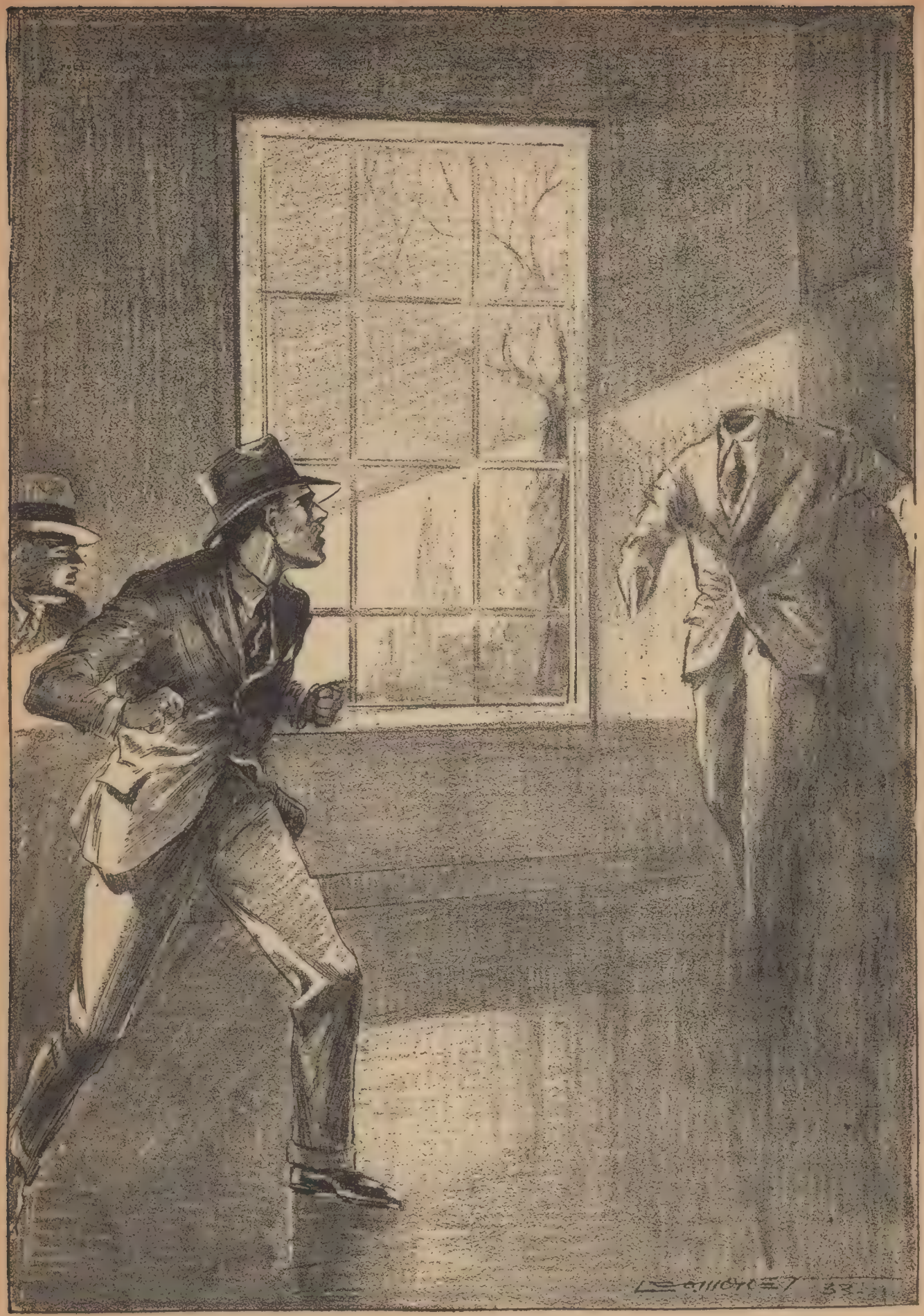
"You see, Dutton! What Guthrie says is right. This man could not have been strangled by his own hands. The thumb marks are in the wrong place. He was strangled by another man! See how my fingers fit upon the marks."

He paused staring unseeingly at us.

"Gentlemen, he was strangled not by his own slender hands, but by those of another man. A man whose hands are as big as mine!"

"But that strangling by another person is impossible!" Dutton exclaimed. "The butler saw the death struggle with his own eyes and he swears Severance was alone."

"Impossible?" Thorpe said lifting his eyebrows. "The man might have been choked before he came out of the house. The butler might be mistaken about there being no one with Severance. He may be lying to protect someone. There is still another possibility. . . ."



. . . a figure so absurd I could have burst out laughing, fraught with danger as the situation was. An animated suit of clothes, to our eyes unoccupied by any human being, perambulated toward us with a comically deliberate stride.

Again that blank unseeing look came into Thorpe's face. A look almost of fear.

"Have you made a complete examination of the body?" he asked.

"Not as yet." Dutton replied. "As Guthrie suggested calling you in, I thought I'd wait until you came."

"Well, let's get at it," Thorpe said briskly.

The Examination

THEY began a methodical examination and I seated myself and began to read a newspaper. Hardly a minute had elapsed however, before I heard a sharp exclamation from Thorpe. I hurried to the table and saw that they had turned the body over upon its face. In the back of the head was a small bloody hole at the base of the skull!

"Evidently struck the sidewalk when he fell," said Dutton.

"That is not so evident," Thorpe said impatiently. "Get your instruments and we'll dissect the head. We must try to remember we are scientists, not guessers."

Turning to me he added: "And you, Guthrie, go back to your office and get all the data you can from the files on Lamont. You remember? Doctor Pierre Lamont who was supposed to have jumped over the American Falls several years ago. They never found the body as I remember it. See what the record has to say about his scientific attainments. What he specialized in particularly. Come to my office when you get the dope."

I could not imagine the reason for Thorpe's request but I obeyed without question. But as I read over the material in the files about Lamont and his supposed suicide, I began to perceive the drift of his thought. Dr. Pierre Lamont's scientific specialty had been the study of the ductless glands. The thyroid gland which regulates the velocity of cell activity, in reality the speed at which we live; the adrenals which activate the bodily machine for fight or flight; the pituitary whose abnormal functioning makes either giants or dwarfs; the thymus, the interstitials, and the mysterious pineal gland located at the base of the skull.

Lamont's practice had been profitable, but he had gambled heavily and race track losses had been blamed for his suicide. The life insurance company had paid his widow over $100,000 life insurance though they had deferred payment until they had satisfied themselves Lamont was really dead. The fact that the body was never recovered was not considered significant, since when a suicide goes over the American side of Niagara Falls the body is forced down behind the rocks at the foot of the Falls and never reappears.

Robbery by an Unseen Hand

THIS had happened nearly three years ago, but when Mrs. Lamont died a year after her husband, it was said that on her death bed she told that she had foolishly drawn out the $100,000 from the bank and was gloating over it, when the money was snatched from the table in front of her by an unseen hand. She claimed that she had seen the money as it floated through the air and out the door as if carried by a ghost. The story has been so preposterous that no attention was paid to it, though the bank verified the fact that she had drawn out the money.

An urgent call from the City Editor forced me to telephone these facts to Thorpe instead of coming to his office.

"All right, Guthrie," Thorpe's voice answered. "Come over when you get through. I've got some work to do here in the laboratory that will keep me here till midnight at least, so it doesn't matter if you are late."

After phoning Thorpe I hurried to the city room and obediently trotted over to the desk of the City Editor.

"Listen, Guthrie," said that functionary. "I hate to wish this on you, but you're the only one around just now. It's really Mac's stuff. Freak head stuff. Ought to be a scream. Fellow ran up to a policeman in Main Street and gasped that he had been wrestling with an invisible man. The thing—that's what he calls it—attacked him in a side street, near the place where he had parked his car. Says he felt fingers clutch his throat and only by violent struggling got loose and called for help. As he did so, the "thing" escaped in an automobile. This auto was standing at the curb and it suddenly started up with nobody in it. This bird says he jumped into his own car and followed the driverless car but lost sight of it in the Amherst Estates. Funny how this 'synethetic likker' gets 'em. Run out and see him. He's being held for observation out at the City Hospital."

The City Editor said afterward he had never seen me make such speed before. Before he finished speaking I had my hat on and was half way to the door. I did not hesitate. To the City Hospital I would go as commanded, but not till I had seen Thorpe first. Luckily as I left the building a taxi lurched by and sprinting after it I leaped on the running board.

Thorpe Is to Be Seen at Once

"UNIVERSITY CAMPUS!" I shouted to the driver as I piled in and slammed the door after me. "And for God's sake, step on it!"

As I entered the laboratory I could see Thorpe gazing intently into a glass aquarium, in which several curiously transparent tadpoles were swimming. Thorpe's great shock of blond hair was in disorder and his bulky thick-muscled frame was taut with excitement.

"I've got it, Guthrie!" he exclaimed as I entered. "That dope you 'phoned me put me on the right track. I think I know who committed this murder—and how—and why! If I only knew where to find the murderer. That, I'm afraid is going to be difficult.."

"Wait till you hear the latest," I interrupted with equal excitement.

Breathlessly I told him the story the City Editor had told me.

"Come!" he cried. "There is no time to lose. This is a clue that may lead to the murderer."

"Shall I call a taxi?" I asked.

"No, my own car's outside. We'll go in that."

Thorpe handed me a thick volume.

"Here's something you can glance over on the way. You read French, don't you?"

I had to admit that scientific French would probably be too much for me.

The Functions of the Pineal Gland

"WELL, the reference I wanted you to read is brief and I can just as well tell it to you," Thorpe told me as we climbed into his car. "It's just this. In the article, published shortly before Pierre Lamont's supposed death, is recounted his experiments with the pineal gland. This tiny gland, no larger than a pea, is situated, as you know, at the base of the skull. Prior to Lamont's researches it was supposed that this gland was the vestigal remnant of the third eye situated in the back of the head, where many reptiles still show it. Lamont demonstrated, however, in this article in the *Comptes Rendus de la Société de Biologie* that the pineal secretion modifies the reaction of the tissues to the stimulus of radiation."

We were now rushing toward the City Hospital at full fifty miles an hour and Thorpe's sentences were not as smooth as they appear on paper.

"I got the impression, Guthrie, in reading Lamont's report that he left much unsaid. He left it unsaid because he was afraid to print it for fear of ridicule, or else because he wished to keep the secret for his own use. This was the sentence that attracted me: 'If young tadpoles are fed pineal, they develop a curious transparency of skin and tissue which causes them to become nearly invisible.'"

"You think—?" I ejaculated.

Thorpe nodded gravely in answer to my unspoken thought.

"I know that what he says about the effect of pineal on tadpoles is true, for I have just tried it in my laboratory. That aquarium you saw me looking at had three tadpoles in it already partially invisible. In two or three hours you will be able to follow their movements by the ripples in the water, but their bodies will have faded to a faint blur."

For the second time that day the skin on the top of my head tightened shudderingly. An icy shiver bathed my limbs.

"Lamont's disappearance—the theft of the insurance money by an unseen hand—the attack on this young man we are going to talk to—and Severance's murder!" I exclaimed.

The Missing Pineal Gland

WE had drawn up at the hospital now and as we stepped out of the car, Thorpe said quietly: "Remember the hole in the back of Severance's head? Dutton and I dissected the head carefully and found the pineal gland missing."

From that moment, events followed each other too rapidly to permit us to continue the conversation. The lad at the hospital held on suspicion of mental disorder at once convinced Thorpe of his perfect sanity. He had unquestionably had a terrific shock the full horror of which Thorpe and I were presently to realize.

"Do you think you could lead us to the spot where the car eluded you?" Thorpe asked when the youth had finished.

"Positive of it," the lad responded eagerly. "But they won't let me out of here."

"I can fix that, I guess," Thorpe said, smiling reassuringly.

We went to the office and Thorpe got police headquarters on the phone.

"I want you to order the release of this fellow," Thorpe told the Chief. "And send the reserves—all you can spare—out to Amherst Estates. We'll meet them at the entrance gateway," he added.

A Visit to the Amherst Estates

A JOVIAL round moon looked down upon the winding macadam drives, prim hedges and stately poplars of the exclusive Amherst Estates, and I remember I reflected as we arrived that this was a stage-setting, far too romantic for the business at hand. Even the two touring cars filled with bluecoats, their silver badges reflecting the rays from the arc-light just outside the gate, failed to dispel the theatrical effect. Once inside the gate, however, the eerie moonlight and our own monstrous shadows grotesquely distorted, gave us all a creepy, uneasy feeling.

We entered the park on foot, walking noiselessly on the turf beside the drive, the young man in the lead. At length we came to a place where two private drives led off on each side from the main road. Here, the youth said, the car had turned, but he did not know which way.

"Lieutenant, do you know who lives in these houses?" Thorpe asked.

"Commissioner Brandt lives in the one to the right, Doctor," the officer answered. "I think the other is vacant, though the furniture still seems to be there. Possibly the people are away on a vacation."

"We'll take a chance on that being the one," Thorpe decided.

Stealthily we crept up toward the dark, lonely house.

"Now, Lieutenant," Thorpe ordered. "Have your men quietly surround the house and let a man stand in front of each window and door. And when I say stand in front, I mean it. Close up. So that no one could come out without bumping into them. And for God's sake, if anything does come out, grab it, even if you can't see it and then, yell for help!"

These strange instructions probably did not make the shaky knees of the usually dauntless officers any steadier. Bullets and bloodshed were their daily fare

but I could see the creepy mystery of this was already getting on their nerves.

Thorpe and I accompanied by a stalwart policeman crept up the steps. In expert burglar fashion Thorpe forced a window open and taking care to make no noise, the three of us crawled in. Slowly we tiptoed through the pitch-black rooms. After five minutes of search Thorpe concluded our quarry must be upstairs. Leaving the policeman to guard the rear stairway we stole up the front stairs, inch by inch. Reaching the top Thorpe cautiously opened the door of a large front room that extended the full width of the house. Our eyes had now become accustomed to the darkness and we could see that the door by which we had entered was the only entrance to the room. If the ghostly Lamont was in there, he could escape only by a jump from the second story window.

Suddenly Thorpe caught my sleeve.

"Shhh———!" he whispered tensely. "Look over there!"

An Animated Suit of Clothes

I SWITCHED on my flashlight and there appeared in the circle of light a figure so absurd I could have burst out laughing, fraught with danger as the situation was. An animated suit of clothes, to our eyes unoccupied by any human being, perambulated toward us with a comically deliberate stride.

"Switch on the lights and guard the door!" cried Thorpe alive to the menace. "I'll handle him. Don't try to help because he might slip away and get out the door!"

A mad laugh came from the invisible lips.

"Ha—ha—ha! The gods are kind! They send me two more nice pineals, so that I can prolong this delightful state of invisibility."

The horrible effect of this cold, sneering, insane voice issuing from the invisible monster was indescribable.

Spurred to action, Thorpe leaped at him. As though struck by a sledgehammer he was hurled back by a blow that made the blood spurt from his lip. Instantly the shape was after him and that vacant sleeve struck murderously at Thorpe's head. But this time, Thorpe, who was an amateur boxer of no mean ability, slipped the blow cleverly over his shoulder and swiftly drove his right fist to the other's midriff. He drew back for an instant, then swung what appeared to be a badly aimed uppercut missing its target by several inches. At once I saw that the miss was intentional, for Thorpe's fist having traveled past its mark came back downward in a lightning backhand blow. It was the deadly lever punch.

His invisible antagonist was staggered but recovered quickly. Now he seemed to abandon fistic tactics and grappled with Thorpe. At this Thorpe was no match for him powerful as he was. The insane strength of the other was too much for him and in a weird, soundless struggle the madman got him down. I could tell from Thorpe's blackening face and bulging eyeballs he was being choked to death. I could stand it no longer. Rather than have Thorpe strangled by this murderous pellucid horror, I decided in a flash to leave my post at the door.

In one leap I had seized a heavy oak smoking stand and brought it down upon the vacancy where the monster's head should have been. In that instant I knew I had killed him for his body now gradually became visible in a horrible fashion, the bones first so that it seemed a clothed skeleton that I looked upon. Then the flesh took on a translucent appearance like pale jelly and finally as Thorpe rolled the body to one side the features of Pierre Lamont became visible.

A diary was found in which the mad scientist had recorded the crimes he had committed, among them the theft of the insurance money, and the murder of Wyndham Severance. But though Thorpe and I searched we could find no description of the process by which Lamont had concentrated or modified the pineal substance so that it would render the human form invisible. That secret died with him. And, as Thorpe and I had no desire to spend the rest of our lives in a padded cell, we held our counsel about Lamont's invisibility.

The End

THE METEOR-MEN OF PLAA

(*Continued from page* 409)

and they distinguished mountains and rivers, then houses and trees. Bancroft skillfully eased the ship down in a clear field near a little village which they learned was in the central part of Norway.

Two weeks later a small group of scientists were sitting with the two neutrosphere explorers on the veranda of the New Jersey laboratory. Bancroft, although elated at the success of his venture was nevertheless reluctant to say very much about it. The others had to draw the story out of him piecemeal by tactful questions. When he had finished he turned to Dr. Browning lounging in an easy chair across from him.

"Doctor, now that you have heard our story, there is one thing I would like to have you explain. I am still puzzled by your message to me just before we lost radio communication with the earth. Why did you ask us to return?"

A Lucky Coincidence

THE curator of the National Museum looked at his friend and smiled. "I was checking over the calculations regarding the distance to your objective when I discovered a discrepancy in the figures. Actually you should have left the earth twelve minutes and nineteen seconds later and I feared that you would miss your mark. But your collision with the meteor retarded the ship exactly the right amount to compensate for the early start. A lucky coincidence, I would say."

Later when the others had departed and Gordon and George were alone once again, the scientist drew his chair up close to his friend.

"Listen to this George," he said with a smile, referring to an item in a two weeks old newspaper, " 'An unusually brilliant display for this time of the year was witnessed last night when the sky was full of meteors or shooting stars. Scientists explain it by the explosion of a dark comet that had entered the earth's atmosphere.' "

"Well, I can explain it more accurately than that," George responded, looking ruefully at the healing scars on his knuckles and thinking of numerous broken jaws among those beings who were once the Meteor-Men of Plaa.

THE END

THE ESSENCE OF LIFE

(*Continued from page* 449)

whose history tells of naught but wars and fighting, whose life to-day is an economic struggle for existence as fierce as any in Nature—a war with this alien, all-powerful life of mighty Jupiter! Perhaps the most I can do is to postpone the meeting for a few years or a few centuries. Planco says we are on the verge of discovering atomic power. Attempts at space-travel are sure to follow. Jupiter would rush to the rescue of a ship in distress, and point out the correct method of navigation. And, when the first earth ships go to Jupiter what will be the outcome? Assuredly attempts at colonization, intercourse with that planet. If I know the temper of my people, particularly the proud white races, conflict must follow. Man knows of no other treatment than destruction for any form of life that cannot be made to minister to his wants, to provide food, clothing or service. . . .

I am tempted to reply, "Yes." . . . .

Then our subjugation would begin, as I have been told, quietly, without any man of earth knowing what was happening, or, if he knew, able to strike at beings that would operate at first from beyond the confines of our atmosphere.

Subjugation?

It shall not be! For the hundredth time I rise from my desk, and shout, "No!" into the empty room. . . .

But is it subjugation?

Is it not rather freedom from man's tryanny and cruelty to his fellow man?

I sit down once more.

Undoubtedly, with Jupiter's absurdly high estimate of myself I should fill a high position in a world so reorganized.

Ah! If I feared that such personal considerations would influence my judgment I would destroy myself before I permitted the danger of such treachery,

* * * * *

Note by J. A. Hammond, M.D.

The writing ends here. What happened after that we can only conjecture. Did he get up and walk out to sooth his nerves, and help to think over this problem his disordered imagination had conjured up? Or did he go out and deliberately seek release from his troubles?

Or, last thought of all, were his writings indeed of facts; and did he reply, madly, "Yes," then in sudden remorse seek release from life rather than face the consequences of his action?

THE END

A long arm freed itself from the rest of the mass and, snakelike, reached over the side of the container. As the pseudopod flowed over the edge the rest of the body elongated itself and followed.

The Silicon Empire

By
Fritz Burg

CARBON, the black uninteresting material, in one of its modifications, becomes the diamond. Silicon, also black and uninteresting looking in appearance, has a combination beautifully crystalline, popularly known as rock crystal. Each of them combines in the ratio of one to two with oxygen. It was the very happy thought of our author to select silicon as the theme of a story of most interesting adventure. It is quite individual in its treatment, and like most stories has a happy ending.

Illustrated by MOREY

IN defense of myself, and to discredit some of those stories that have tended to degradate my character, I feel that an explanation for my recent retirement from the field of scientific exploration is due to the world. Now that a year has elapsed since my return from my last expedition and I have adjusted myself to my more peaceful environment I believe that I can give account of myself without injecting too much of my personal opinions and feelings.

I have always been something of a globe trotter. In explanation of that: it has simply been my nature. Some people spend a lifetime amassing a fortune, and others hurry themselves to the grave trying to become famous, but I have enjoyed the whims of my desires and have sought neither of these.

My wandering nature has made me a fatalist, more or less, and although I know it is selfishness on my part, until recently I have cared little for other people or their welfare. The only fame that I have attained has been that of an unusual liar. But this is to be expected; for, one sees and experiences things in those out of the way places that are hard to believe even after they have been experienced. So, how can the average man be expected to believe in the reality of those unusual things, with which he rarely comes in contact?

My college education aptly prepared me for the life that I have led. My athletic activities developed my physical self and my interest in science promoted in me the sense of close observation, both of which I have been thankful for, since my life has depended on the co-ordination of both of these faculties more than once.

Since graduating from college, I have spent my time with one expedition and then another; however, no adventure can quite compare with my last one, and I must tell of it, regardless of the notoriety I will get as a romancer.

A Warning Disregarded and Strange Developments—The Expedition

I DO not know what warned me against that strange trip. It seems as though there had been a premonition of the unusual from the start. It may have been some knowing fate that led me on. With it all, I profited; for, it was on this venture that I found what has proven to be the greatest happiness of my life. I know I shall never go again into that place, nor live again through the torture I suffered at the hands of those weird creatures.

I said, "at their hands," but that is wrong; for, they had no hands, nor limbs at all; in fact, there was nothing human about them. I probably should not even call them creatures, for they were not creatures in the ordinary sense of the word. But I am afraid I am getting ahead of my story. It will be best to start at the beginning of the strange adventure. Perhaps, if I do that, you, too, can feel as I do about the Silicon Empire.

The late summer of 1927 found the Blackstock Expedition slowly forcing its way through a section of the heretofore impenetrable jungles of the Middle Congo District. I was one of its members.

The object of the expedition was to explore the district between Mompono and Mondombe for the ruins of the ancient city of Bhanikinoku. Although the

distance between these two towns is a little over a hundred miles, the territory had never been explored by white men.

Dense tropical forests, formed a living barrier that enveloped within its heart, the secret fate of a long-lost civilization.

Bhanikinoku, the City of Glistening Stones, was supposed to have been built by a prince of the royal house of ancient Egypt some forty-five centuries ago. As the legends would have it, the heir to the crowns of both of the Egypts, had rebelled against the decree of his royal father, the reigning Pharaoh, by refusing to marry his own sister. The ancient Egyptian dynasties were proud of their lineage and in order to preserve the purity of their blood they resorted to marriage within their own family. This system it was that the crown prince refused to be bound by.

Story of the City of Glistening Stones

THE city, according to records discovered in a tomb at Luxor in 1924, had been built by the fugitive prince Iubitisis and his royal followers, after they had rebelled against the Pharaoh and had settled in the far southland. For generations the city had flourished being protected by the jungles from the powerful Egyptian Kings who sought to bring the rebel prince or his descendents to justice. Stories of a city, whose public buildings and temples surpassed the magnificence of the architectural marvels at Thebes, Luxor and Karnak, had been brought back by the invading Egyptian armies.

All they saw and told of had been recorded, but despite the repeated invasions the city remained independent and aloof from the rest of the world.

Then after several centuries the city was forgotten. As the jealous Pharaohs lost their power and the Egyptian civilization fell before the sweeping tide of newer empires the city became but a distant memory. No one ever penetrated that part of the jungle again to return with news of the lost city. Four thousand five hundred years passed and the story of prince Iubitisis was forgotten by all except the most learned scholars of Egyptology.

And so, equipped with all the devices modern science has given mankind for its protection, our expedition sought again to find the remains of the ancient metropolis.

The party had organized at the city of Moma on the west African coast. From there we had gone up the Congo to the town of Lulongo, and thence up the Ikau and Maringa rivers to Mompono. Until our departure from Mompono our trip had been uneventful and uninteresting to those of us who knew the dark continent from previous expeditions. But, after leaving civilization behind us, the country became interesting to all of us. Although I had explored the African jungles before, I had never witnessed such dense plant growths nor such great varieties as we did on our first day out.

The Jungle

IT is easy now to understand why the expedition failed. The most vivid descriptions of the country given by those who had attempted to enter the region before had been none too forceful. We had sought to profit by the previous failures and had worked out the most intricate details in planning our own venture, but these carefully designed plans availed us little, when we encountered country that was so varied from the usual African wilds that it was hard to believe we were actually traversing a part of the same continent.

For eight days after leaving Mompono, the long weary march during the day, in which every step of advance proved a struggle of man against nature, so slowed the expedition as to throw it three days behind the pre-determined schedule. The plant growth of creepers and vine formed an undergrowth barrier like a gigantic spider web. As might so many octopus arms, the creepers seemed to grasp ones' body and in places a path had to be forced by hewing a gateway through the living undergrowth.

Across vast expanses of marsh land we walked, bitten and stung by the poisonous insects until our bodies became great swollen masses. In the slimy ground the hordes of reptiles wriggled and squirmed and bored their way deeper into that mud, of which they seemed a congruous part. The sickening sweetness of the tropical flowers with their drugging odor threw one into a perpetual semi-stupor. And over all was the stillness of death, broken only by the occasional scream of a parrot or the splash of some amphibian, as he sought the refuge of the murky waters.

Survival of the Fittest

IN the tropical forests, as in no other place, one comes face to face with that biological law, that only the fit shall survive. There is a conflict of nature against itself, and when man invades with his civilization all nature turns in the jungle's heart against the outcast that was nursed to a higher state. Life stalks life to live. The conquered is food for the belly of the conqueror. And the species, that can not work out its own salvation, sinks first into obscurity and then into oblivion, as it loses its place in that ever pending struggle to perpetuate its kind. Thus the laws of organic evolution are self-enforcing, preserving and bettering the best and with pitiless severity forcing the degenerate to extinction.

Successfully we fought the Carnivora and lived. But then the fever came. One by one the marching file decreased. We knew we would never reach our goal. As a caravan of dead men's souls we moved on, into what we did not know.

Things went from bad to worse as we finally realized that we were lost. North, south, east and west seemed to stretch out infinitely on either side. Whether our goal was in one direction or the other we did not

know. Only a lost man can realize the hopeless feeling that comes to one forced by reason to continue in one direction, not knowing whether he is nearing or getting further away from his objective.

I had always lived a life of great physical activity and for that reason I probably suffered the least, nothing, however, in my experience had prepared for me a trip like that. It is one thing to stand face to face with death and to pit one's intelligence and brawn against the wild jungle beasts, with life as the stakes, but it is quite another thing to be helplessly lost and to feel the presence of some unknown power bordering on the supernatural.

As the marching file continued to dwindle in number the death of one of the party became but another unfortunate incident. Wondering who would be next, we solemnly placed a marker over the graves of each of our comrades in his turn and gave a silent prayer for his continuance in that adventure of which our earthly venture had been but a start. Our attitude toward death became indifferent as the days dragged endlessly on.

It seemed that ages and eternities passed and then I was alone. Of that ill-starred adventure I was the sole survivor to push on and I was more dead than alive.

Then one day my turn came. Picking my way along a half formed trail made by some beast of the jungle I tripped and fell. As I struck the ground my head was thrown against a rock and as the darkness of the unconscious reached out to swallow me, I had a fleeting glimpse of my life as it toppled on the brink of eternity and then plunged headlong into a future from which there was no returning. I was sure that I would never awaken and with that thought I lost consciousness.

A Strange World of the Unconscious

HOW long I remained unconscious I do not know. My awakening was so slow and gradual that I did not at first realize that I was awake and that the darkness which enveloped me was due to a material confinement. Slowly, I came into the possession of my faculties and I realized that I was captive. At first I could not understand the situation. As my mind cleared my first reaction was that of fear and dread of the overwhelming darkness and the unknown. Then I commenced to realize my predicament. In the light of logic I tried to locate myself. My instinct, or probably reason, told me that I was deep under ground. The almost overbearing heat would seem to indicate a relatively great depth.

Slowly I arose to my feet and feebly attempted to explore my prison. It could not have been more than twenty feet square. On every side I ran into a blank wall. The walls were jagged and irregular and by feeling their surface in the darkness, I judged that my jail had been hewn from living rock.

For some time I groped aimlessly from one corner of the room to another, wondering where I was and what strange fate had brought me there. Once or twice I tried to scale the rough wall, but I was unsuccessful in these attempts as I was never able to ascend more than ten or fifteen feet before I found further footing impossible. Evidentally, I reasoned, I was at the bottom of some deep pit. How deep my dungeon might be I had no way of telling, nor even of guessing. I remember wondering how the air was kept fresh and why there was no underground water present. I gave up all attempts to find an explanation for either of these two facts and sat down on the floor to formulate some plan of action.

The loneliness overwhelmed me, but it was a different loneliness from any that I had ever experienced before. There was, mingled with it, the sensation of impending dangers, which was accentuated by the darkness to a feeling bordering on panic.

Resting on the floor, I had almost decided to attempt another ascent, when a sound arrested me.

From high above, in the inky blackness, came a creeping sound. It was not the sound that some animal might make creeping over the ground, nor even walking but, rather the lapping sound, which water might make, as it sluggishly washes over an uneven surface.

A Dreadful Intruder

I LOOKED up. At first I was not sure that I saw. Rubbing my eyes I looked again. Then I saw.

Horror froze me immovable to the spot. Slowly, inch by inch, a vague phosphorescent splotch of greenish-yellow light crept down the wall of the pit.

It had no definite form nor shape. It seemed to be a ghastly glowing mass of living jelly, which conformed to the irregularities in the surface over which it flowed. As slow as it moved it seemed to progress with definite plan of action and to have a definite objective in view.

That it was a living thing I could not doubt. Its body, I know, measured ten feet in diameter and was roughly comparable to a torpedo in shape, the greater bulk being amassed in the end which preceded the body, which end I judged to be its head.

I can not describe my sensation as I watched that thing crawl down the walls of the pit, nor can I describe the thoughts that ran through my mind, as I awaited whatever was in store for me. I wanted to scream—and as I think of it now—I believe that I did. Flight was impossible. I was helpless.

Just above the floor the form halted, drew itself into a globular shape, and stayed plastered against the wall. For a second it remained thus and seemed undecided, but after that pause, as though with quick decision, part of its plastic body gathered itself together, grew rapidly out from the rest of the mass, and sought me out, entwining itself about me as might the arm of some gigantic devilfish.

As the arm encircled me I became limp. I have seen a snake charm a rabbit with his hypnotic eye. I know now that it is not really hypnotism that holds the rabbit, but mere fright; for, I too, was hypnotized with

terror and was unable to act. With slow deliberate motion the arm dragged me to the central mass.

Having pulled me to itself the thing commenced to wrap its body about me. I sank bodily into its plastic mass as I might sink into quicksand. I was so engulfed as to leave only the upper part of my body free.

Then our ascent began; for, the thing embracing me with a part of its body began to 'flow' up the wall of the pit.

Seeing no immediate danger, my first feeling of panic commenced to leave me, so that I gradually collected my thoughts and commenced to study the nature of the thing that had captured me.

I perspired freely but to no avail, for it seemed as though I was being scalded alive. The body temperature of the thing was very much higher than my own.

Studying its body structure, I saw that there were so many points of comparison between this thing and the microscopic amoeba that I could not help but compare the two. Except in size there was little difference. Like that microscopic, one celled animal, this weird creature had no fixed shape to which its body conformed. Its motion was distinctly amœboid in nature, that is, it moved by allowing part of the plasm of its body to advance, or flow in the direction desired and then advanced the rest of the body until this pseudopod had been absorbed again in the main structure. This process repeated gave it locomotion.

Unlike the amœba, its nucleus, or the part of the cell that governed its actions, was not located in the center of the cell. There seemed to be one pseudopod which was never absorbed into the rest of the structure and always preceded the rest of the body. In this, the pseudopod nucleus could be seen as a dark granular mass, clearly visible through the plasma being cast into dark silhouette by the rest of the luminous body.

I vaguely wondered if it absorbed and digested its food after the manner of the amœba. I surmised that it did and expected that it would eventually completely engulf me, and that I would be digested within the cell. The thought was not comfortable.

The Ascent of the Wall of the Prison—The Meeting of the Amœbas

IN vain I made feeble attempts to free myself, though to have done so would have been certain death in a fall to the bottom of the pit. I was entangled in the jelly as a fly is entangled in fly paper. I was able at times to free either an arm or leg but always at the expense of pushing some other part of my body further into the jelly-like body that enveloped me.

My captor seemed to be unaware of my existence. He merely crept up and up with his flowing motion. The ascent was silent except for that horrible creeping sound that the thing made, as his body, advancing over the rough surface, filled in the crevices to give him footing. Very abruptly the shaft came to an end, probably some three hundred feet above the bottom of the pit. At the top, my carrier flowed over the edge.

As we came over the rim I found myself in a large room. I was surrounded by thousands of creatures resembling my captor.

At first I could hardly convince myself that what I saw was not some hellish illusion. The floor was alive with their grotesque bodies and itself seemed to quiver with life. No two of the forms were alike and all were constantly changing in shape and form as they moved about in their creeping manner.

Although they had no eyes, I had the feeling of having a thousand eyes focused upon me and I knew that I was being watched and studied by that unearthly audience.

A most uncanny sensation swept over me and then followed a feeling of despair and hopelessness. I was resigned to my fate, for I was a plaything in the hands of the supernatural, against which I could not fight.

Then I noticed the room. It was in reality a gigantic underground cavern and was roughly circular in shape. Apparently the cavern had been formed at a time in the far distant past by some geological twist. The floor was polished to the smoothness of a flat glass surface and had an oily appearance that reflected the forms that passed over it. The room was lighted by spherical globes placed at intervals around the wall. Apparently these globes were made of some transparent material and filled with a phosphorescent mineral, since they emitted a sickly, green glow. The ceiling of the place I could not see for it was lost in darkness; yet, I instinctively knew that it was a great vaulted hemispherical dome. The rough artifice and few furnishings bespoke the workmanship of ages gone by. By some inward nature I knew that the workmanship exhibited belonged to a far and distant past that was lost in antiquity.

At intervals around the wall I noticed dark, circular openings about ten feet in diameter. From one of these openings another of the amœboid creatures was emerging by simply flowing out as would so much viscous fluid.

A Vision of Beauty

MY eyes finally came to rest on a raised dais in the center of the floor. For a moment I could not believe my senses; for, reclining there, on a slab of polished granite was the most beautiful woman I have ever seen. There was something bewitching about her aside from her perfect form. In the hazy glow her body seemed to reflect the light so that she looked more like a piece of perfect statuary rather than a living being. As I watched, I had almost decided that she was a marble image, until she moved. Slowly she arose to a sitting position and faced me. I thought of a Greek goddess executed in Carrara marble in the Naples museum. She was, indeed, far more beautiful than any living human being I had ever seen. Her jet black hair fell loosely over her perfectly shaped shoulders, silhouetting the perfect white of her body.

As she watched me her eyelids were half closed, and

beneath their long lashes I could see the dreamy look of her dark brown eyes. Yet, her face wore an expression of infinite sadness, as might a face on one who had lost all that life could give in the way of happiness.

So engrossed was I in watching that dream of human perfection that I had not been aware of the fact that my captor, carrying me, was slowly approaching her and that he had finally come to rest not more than ten feet away from the dais. Slowly my amœboid carrier placed me on my feet and loosened himself from about me.

For several minutes I stood transfixed to the spot. I do not know if I could have moved or not, had the thought occurred to me. As it was, I was unable to think. I stared fixedly at those dreamy eyes before me. They seemed to burn themselves into my consciousness and to be reading and directing my thoughts.

The Vision Speaks

THEN she spoke to me, and in a voice so musical that it soothed my shattered nerves. I did not know then how I was able to understand her language; in fact, I was not aware that she was using a language other than my own.

"Earthman," she said, "I see bewilderment in your mind. Do not be afraid; for, you of all your race are the most fortunate. You are the first of your kind to be brought here since I came some forty centuries ago."

A thousand questions rushed simultaneously to my mind. Finally the predominating one separated itself from the rest and I asked, "Where am I?"

"Fifteen miles below the earth's surface," came her answer, "and in the throne room of the Silicon Empire."

For the first time I became aware of the fact that I, as well as she, was speaking in a language of which I had no previous knowledge. Watching her, I saw a smile cross her face. She was reading my thoughts!

Aloud she spoke to me again, "Do not be surprised; you are speaking the only language I know. For thousands of years we have developed the mind. Since I can read your thoughts, but you can not read mine, it is necessary for me to form my words in your mind that you can not only speak to me but that you can understand my expressions."

So assuring was her voice that I soon lost my bewildered feeling. Then I asked, "Why have I been brought here?"

After a short silence, she began, "It is a long story; one that has its beginning in past time beyond recounting." That dreamy expression came again into her eyes, and she continued with the most unbelievable story I have ever listened to.

Silicon Life

"EONS ago, when the earth's upper crust was cooling, and long before the first form of life ventured forth from the sea, there was life here in the inner world. But the life here was decidedly different from life as you know it in the outer world, Earthman."

"Life, as you know it, is essentially a series of chemical and physical changes that take place in the substance you call protoplasm. The life that developed here did not depend on protoplasm; at least, not on the type of protoplasm that is found in the creatures of the outer world.

"All living things as you know them, are built of certain complex chemical compounds. All of these compounds have as the basis of their structure the element carbon. Here in the inner world a type of life developed that depended on the element silicon as the basic element. You are as much a curiosity to us as we are to you. Your life could not have evolved in the inner world any more than our type could have evolved on the outer crust.

I know you have studied the science which you call chemistry. We, too, have studied that science, but much longer than you, for our knowledge was in a highly developed form before I came here thousands of years ago. Even you know that the element silicon can form complex molecular structures as does carbon, but it has never occurred to you that those structures might become so complex as to form living organisms. The only difference in the development of these two kinds of life was in the environment, or in conditions; for, you know the conditions, under which the few silicon compounds form that you know of, are different from the conditions under which the corresponding carbon compounds form. Conditions here were adapted to the development of silicon life just as conditions on the outer crust were adapted to carbon life.

"Life on the outer world developed much later than it did here. The first life on the outside world began in the sea in the form of small one-celled creatures, possessing practically none of the characteristics of the highly developed forms found there to-day. The first organisms developed from the inorganic substances found in the sea and so slow was the gradual change from the lifeless to the living form that the change was almost imperceptible. Once formed these minute organisms continued to develop. They had the characteristics that distinguish all living things to-day, that is, the ability to respond to certain stimuli, to reproduce their own kind and to grow.

Silicon Protoplasm

"THE first creatures of your world were tiny masses of jelly made up of certain carbon compounds, and since all life there grew and evolved from them, all life on the earth's surface now is built on a protoplasm that has carbon as its basis. Here the first life was silicon life and all life that has come from it is based on silicon protoplasm.

"Conditions on the outside were different from the conditions here. The individual that could not adapt himself to his surroundings perished and so his species came to an end. Those, that could change with the

conditions, evolved bodies which were better adapted and so the highly organized creatures of today have come into existence. Here the conditions remained practically constant. Except for increasing in size the creatures of the silicon world have altered but little."

For a few minutes she stared fixedly at me. Apparently her discussion had ended. Slowly she arose to her feet and came toward me. "Come, Man of the outer world, we have waited for you a long time and now I will show you what we have accomplished during the thousands of years that your race has marked time with practically no change for the development of a higher form."

Taking my hand she led me across the room. She had a most unusual way of walking which might be described as being ethereal. She seemed to glide along as might a sail before the wind.

As we advanced across the room the creatures on the floor moved to one side and left a pathway leading to a large opening in the wall some two hundred feet from the dais. That first feeling of panic had left me; however, I experienced a most eery sensation as I 'passed in review' before that line of living jelly masses. Nearing the doorway she released my hand. How I wanted to take to my heels and run; but I knew any attempts to escape would be futile, so I cleared my mind of such thoughts.

Entering this crude doorway she preceded me and for some few hundred yards I followed her down a semi-dark passageway finally entering another large room.

The Laboratory and the Problem

THIS room was quite different from the throne room. It was a laboratory. On every hand were signs of the greatest activity. I was amazed to find those amœboid creatures carrying objects from one place to another, manipulating complex pieces of apparatus, and performing other laboratory duties. They seemed to experience no difficulty in the performance of their duties; in fact, one of them could do several things at the same time merely by creating from his body structure another pseudopod. I marveled at the intelligence that directed their movements.

My guide knowing my thoughts spoke to me, "You see, Man, the degree of intelligence we have developed; yet, with it all there is one thing lacking and to solve that problem you have been brought here.

"We have developed almost perfect brain structures yet our bodies we cannot change. The silicon life is immortal, and the only death an individual can experience is by dividing to form two individuals; so, all the creatures you see have as a part of their body, some of the first silicon life that ever lived. You, Man, must help us solve a problem."

I wanted to ask her how I could be of help to such a highly developed intelligence, but before I could speak, she took my hand again and led me to another room adjoining the laboratory. This room was quite a bit smaller than the laboratory, being only about thirty feet square. In reality this room was but a cave. It showed no signs of artifice and the only apparent addition was a massive door, that was fitted to the entrance through which we had just come.

The place was furnished with a stone divan, constructed of a thin slab of granite, supported at either end by polished blocks of the same material and elevated but a foot from the floor. In one corner of the room, in a glass tank, reposed the apparent lifeless form of one of the silica beings.

The woman asked me to be seated, and as I did so, she seated herself beside me.

"And now," she started, "I shall tell you the purpose of having you brought to the Silicon Empire.

"Four thousand years ago there existed on the surface world and directly over the location of this empire a city known as Bhanikinoku. Many times the silicon warriors made raids on the city in an attempt to capture a male and a female human. Every attempt was a failure with the exception of the last one and on that raid the silicon people captured the princess Isita. After that successful capture another expedition set forth to take a male human, but on reaching the surface the invaders found that the inhabitants of the city had died. Supposedly some epidemic had swept the city free of all life."

"But," I interrupted, "surely you are not going to tell me you are the princess Isita and have been alive four thousand years."

The Body and the Mind of the Princess

SHE looked at me and smiled. For the first time I saw something in her face I had not seen before. Perhaps it was only in the smile, but whatever it was made my blood run cold and I realized that the answer would be more than I had bargained for.

"Yes and no," she said, "this body which you see is the body of the lovely princess, but her mind and soul are there." Pointing, she indicated the jelly mass in the glass tank.

Then I realized what had warned me when I saw her smile. The beautiful body had for its directing intelligence the mind of one of the silicon people. How the transfer had been accomplished I did not know. Thoughts and plans rushed through my mind so rapidly I had no chance to grasp a single one. I had an inkling of the fate that awaited me. I wanted to run yet the horror of the situation rendered my muscles useless. It was as one of those dreams which everyone has experienced; that is, a maddening desire to escape some hellish vision yet unable to move.

I looked at her. That smile had turned to a diabolic grin. "We need you, Man, a male of the species to complete our great experiment." With this she arose from the seat and looking at me said, "I shall return, Earthman," and with that she left me to myself, closing the stone door behind herself.

For a time I thought that I would lose my reason.

I rushed madly about the room kicking at the stone wall, but it did me little good for my prison was another room cut from solid rock.

I had almost worn myself out when I finally sank limp to the floor. As I did so my eyes came to rest on that glass tank filled with the silicon body. My first thought was to rush at it and destroy its life, but my reason told me better, for I knew that this thing had no intelligence other than the stupified mind of that unfortunate princess of ancient Egypt.

The situation was most nerve racking; it was mental torture to be left alone with those thoughts that raced through my mind. It is a wonder that I was able to think at all.

The fact that there was a type of life possible which did not depend, in its molecular structure, on the element, carbon, was a thought that had never entered my mind before that time. Yet, there is no reason why it should have seemed so impossible to me.

When the great science of the chemistry of carbon compounds was first developed it was called organic chemistry, because it was believed by the early investigators that all carbon compounds depended on life or were in some way products of living organisms. With the laboratory synthysis of these same so-called organic compounds, this concept was abandoned, for a laboratory synthysis simply proved that life products could be produced from inorganic materials.

It would have been only natural to assume that life did not necessarily depend on carbon, but that the conditions of environment had developed that type of life best suited to the conditions. That there was a type of environment best suited to silicon life had not been predicted.

Chemists had known for some time that the element silicon is very much akin to the element carbon and had even been able to prepare some laboratory compounds of silicon corresponding to the like carbon compounds.

Yet, it was not this revelation that had so upset my reason, but the fact that one of these silicon creatures had actually taken possession of that beautiful girl's body, and that soon I was to be a slave to that superior intelligence, was the thought that had turned my mind into a jumbled maze.

The Vampire Princess

HOURS must have passed. There was no way of telling time. Sitting on the floor, with my head between my hands, I had the feeling of being watched. I looked up. There stood the woman-thing watching me. She had quietly entered the room unbeknown to me. I do not know how long she had been watching me.

As I looked at her this time, in the light of understanding, that once beautiful white body took on the appearance of a dead soul of another world.

"Now, Earthman," she said, "you have rested. Unfortunately your mind could not stand the strain I thought it could. I have come back to finish my story and to prepare you for the new life of your future years."

Seating herself on the floor beside me she continued, "The purpose of bringing you here can be briefly summarized. For ages the Silica people have lived and reproduced their kind but never has there been a change in their body structure though their mental powers have surpassed all that was hoped for. A silicon individual comes into this world fully equipped mentally. Once in a thousand years an individual grows to such a size that it becomes necessary for it to divide. When this is done both halves are identical and possess the same mentality. Unfortunately each individual possesses the same body structure, the same sex (which is no sex) and the same hereditary characteristics. Since all silicon life came from the same source all individuals possess the same heredity and there is no distinct individuality or character. We wish to develop two sexes and have decided on a plan in which you are to take an integral part.

"We wish to combine the good of both types. We wish your method of reproduction and our superior intelligence combined. We shall accomplish our end in this way: one of the silicon people will by a hypnotic process enter your body and your mind shall occupy its amœboid body. That has already been done for there lies my body with the mentality of the Princess Isita, while I possess her body with my own silicon mentality. With these two human bodies we shall then reproduce other humans. Eventually there will be produced a race of humans with super-intellects.

This sex will enable our people to reproduce at will and by inbreeding of individuals who have developed along different lines we shall be able to maintain a balance which shall be for the betterment of generations to come and a more rapid rate of evolution will take place."

After my preceding experiences in the strange world I cannot say that this cold-blooded discussion had much further effect on me. To say the least the idea was repulsive, but not much more than I expected. My courage arose enough to ask a question. "But when is this experiment on myself to take place."

"Soon," she answered, "in a short time one of the silicon people shall come to take your body under control and I shall again possess this girl's body. Just now I shall take my original form for it is better adapted to my needs. I will leave you for a short time, Earthman, but two of us will return as soon as a few minor points of the experiment are settled."

So saying she reclined on the table-like seat and apparently fell to sleep. I turned my attention to the mass in the glass tank. It had apparently come to life. A long arm freed itself from the rest of the mass and snake-like reached over the side of the container. As the pseudopod flowed over the edge the rest of the body elongated itself and followed. The thing once on the floor gathered itself into a more compact mass and with its amœboid motion flowed past me and out through the door.

I then turned my attention to the apparently lifeless

form of the girl. As I watched she moved slightly. Then I realized what had happened. The silicon mind had taken back its own body and returned the girl's mind to her body.

I moved closer and brushed the hair from the face of the long-lost princess. I looked again at her well defined features. The expression of her face had changed. She now had the mind and soul which she had before this diabolic experiment had been performed on her.

The Awaking of the Princess

AS I watched her the eyelids flickered and finally opened. Then she made the most pathetic sound a broken heart can give. There was a slight sob. It was the first real human act I had witnessed since leaving the outer surface and my human instinct came to my aid. I took her in my arms and kissed her as one might kiss a small child. She closed her eyes and placed her arms about me and I felt a slight tremor pass through her body.

Then I spoke to her. I spoke in the language I had used when talking to the mind that had occupied her body. I simply told her that she was beautiful. It was only natural that I should say that, for it was the thought uppermost in my mind.

She looked at me with surprise, and as though she had just noticed me, her eyes looked at me inquiringly.

Evidently she too retained the words of that language and had obtained them by the same process I had. With a puzzled expression, all human and feminine, she looked at me and asked, "Who are you?"

The human emotions and instincts must be universal, for I, a twentieth century man, placed my arm about the waist of that beautiful Egyptian princess and she understood and moved close to me. It may have only been her natural reaction seeking companionship of its own kind, but I had rather believe it was something else.

Thus a gap of thousands of years which spanned between the girl and myself were closed. For some minutes we sat thus. What thoughts raced through my mind! I had lost track of everything and even forgot my pending danger.

Then I told her who I was and tried to explain as best I could, where I had come from and how I had fallen into the hands of the Silicon people.

She experienced some difficulty in understanding that four thousand years had passed since she had been brought to that place. She explained that she had remained in a state of suspended animation for the greater part of the time and that the silicon thing had only taken possession of her on my arrival in order to meet me on an equal basis and to be able to carry on a conversation with me.

I looked at her again. For the first time, we both realized her scanty attire. Hastily I relieved her embarrassment by sharing part of my clothes with her. I was rewarded by a smile of sincere gratitude. She was perplexed over the manner of clothing which I wore. Having never seen civilized clothing as we know it to-day, it was only natural that she would be perplexed.

Planning an Escape

I THEN asked the princess if she knew any way out of the uncanny place. She gave me a hopeless look and my spirits sank.

"But there must be a way," I insisted, "we can not stay here and subject ourselves to the experiments of these insane things."

"There is only one possible way," she said, "but even that is hopeless. It is to run away by going up the passage connecting this place with the outside world. Although you say I have been here four thousand years I remember clearly the day I was brought here by way of that passage." She buried her face in her hands and again gave that pathetic sob.

It was too much for me to stand without attempting something. I took her hand and looking into her eyes I told her that I would take her out of the place by the way of the passage if she would but trust in me and tell me the direction.

"I do trust you, my friend," she replied, and in those words I found the encouragement that made me more determined than ever to return to my world.

Together we planned our escape. Rather she did the greater part of the planning and I memorized her directions. No difficulty seemed impossible; for, I was returning with her to the outside world—to our world—and the risk of life for the purpose of that accomplishment seemed small.

When the plans were completed we talked of ourselves. We talked of her and of the time in which she had lived. She told me that she was the direct descendent of the rebellious prince, Iubitisis. When I attempted to tell her of the changes the world had undergone in the thousands of years since her abduction I had little success in making her understand. So we sat in silence and awaited the return of that intelligence that sought the lives we were going to save.

The Flight and the Escape

PRESENTLY it came. With its amœboid motion the thing entered the doorway, crossed the floor and pourself itself again into the glass tank. We had watched the process silently.

Having settled itself in the container, we knew what was to happen next. It would repeat the process of taking possession of the princess. But in that brief pause my earth muscles, designed for a greater speed of action than the sluggish silicon protoplasm showed for once the advantage of a balanced body and mind over a helpless protoplasmatic mass guided by superior mental power. Quickly I lifted the stone slab which had been our seat and fitted it as a lid over the glass tank. Turning, I took the princess by the hand and fled. We passed through the laboratory by which I

had entered, and in going I instinctively grasped an iron bar for a weapon. So rapid had our exit been that the creatures in the laboratory had little time to grasp the situation or forestall our flight. Before a pursuit had started we were fleeing up a semi-dark corridor leading off in another direction from where I had entered the laboratory.

We realized that our escape meant the failure of those plans thousands of years old, and for that reason we expected an organized pursuit. Our only hope lay in our ability to move faster than the more sluggish creatures that followed us.

In the semi-darkness of that underground labyrinth we ran. The uneven stone floor gave us uncertain footing and hasty caution was necessary. It seemed as though we had traveled miles, but in reality it could not have been more than a single mile, when abruptly we came to the end of the lighted corridor. Ahead of us the passage yawned like a great open mouth. There was no turning, so we continued to pursue the same direction. Our advance was slowed on account of the darkness and we were forced to feel our way along, guided by the walls.

Had I only my own safety and escape to consider I would have never had the courage to continue. The darkness could be felt. I found myself opening my eyes wide in a vain attempt to see. At times my imagination would run away and I would expect the next step to plunge me down some black pit. There seemed to be no foundation to anything and my body appeared to float in a great dark void. Then I would shake those thoughts and strike the wall with my fist and grasp more firmly the hand of the princess as I led her on through the rough path of escape.

We talked little although both of us must have had the same thoughts. At times we rested and then started again. The corridor took on a greater and greater angle of ascent until we were virtually climbing on all fours. The jagged edges of rock cut our flesh until we were bleeding in many places, yet we dared not stop to rest or give attention to our wounds any more than was absolutely necessary.

We struggled on in the darkness for hours. I marveled at the girl's endurance. I knew she must be weakening, but she showed more determination than ever. After one particularly long ascent we paused to rest. The princess was exhausted and thinking that we had put enough distance between ourselves and our pursuers I suggested that we rest for a short time. We had hardly seated ourselves on the ground before she was sound asleep.

My Sleep and My Dreams—The Prayer

I TRIED to force myself to stay awake, but I was more exhausted than I had thought, and I too was soon fast asleep. I slept and slept and dreamed and dreamed. They were dreams of an exhausted body. Grotesque forms followed me and I ran, was caught only to escape and run again. After hours of this sort of dreaming I was disturbed by a light shining in my face as does the morning sun when it awakens one.

I opened my eyes and what I saw caused me to cry out with joy. With a start, I jumped to my feet. We had fallen to sleep not more than fifty feet from the exit of our tunnel and the early morning sun was shining bright in my face. The princess, awakened by my outcry, was not slow to realize our good fortune though she had not seen the sun for thousands of years. Quietly she dropped to her knees and bowed her head to the sun. Then I remembered, the solar disc was the chief deity of ancient Egypt. Quietly I awaited the completion of her prayer of thanksgiving.

Together we went to the opening of the cave and stepped fourth into the sunlight. It was a blessing to again breathe the fresh air of our world and feel the freedom of standing under that unbounded ceiling, the great blue sky.

The exit of the tunnel was on the side of a cliff. Looking down from where we stood the princess pointed out to me the ruins of the long lost city that she had known so long ago. Even from where we stood, the ruined condition of the city was apparent, for it was interwoven with jungle growth. As we watched the scene, I saw something that caused me to shout again; for, smoke was rising in a long thin spiral at one edge of the ruined city. I pointed it out to the girl. It could be caused by but one thing. The ruins were inhabited.

As we quickly descended to the city the princess' excitement increased, for she expected to find the descendants of her people. As we approached in the direction from which the smoke came, I am afraid the girl suffered quite a disappointment, but her disappointment was my joy. We had come on the camp of white men—white men who had been sent to rescue the expedition.

I do not remember much of the trip back to the States. It would probably be uninteresting if I did try to tell of it, but I shall always remember my trip into the Silicon Empire. I shall never return to that place, but I am glad that I went the one time; for it was there that I found the greatest happiness of my life. The princess is now my wife and I am no longer a soldier of fortune.

THE END

Across the Ages

By Allen Glasser

IT is the peculiarity of the readers of stories that they appreciate a tale more if it brings in an utterly unexpected end. The reader may follow this story to the last four or five lines without the least idea of how it is going to terminate. This was something that O. Henry could do to perfection, and our author gives an ending that we believe the great exponent of short story writing would have found it hard to surpass.

Illustrated by MOREY

IT was noon of an August day, and out of a sky of molten lead the sun glared pitilessly down upon the panting city. New York was in the stifling smother of a heat wave such as the oldest inhabitants could not remember having experienced before. The fiery visitation had lasted for several days, and showed no sign of breaking.

Morning after morning the sun rose triumphantly waving its golden streamers, to blaze relentlessly through fifteen hours. When at last it subsided into a scarlet bed, the night brought no relief in the heavy pall that closed down upon a gasping people.

Relief organizations were working overtime, extra water tanks were flushing the streets. Free deliveries of ice melted away as they were doled out, and only electric fans produced a sirocco. Men went coatless and collarless, women fainted over their household duties, and, in the streets or shops, children cried from sheer misery. Paint blistered and peeled in the heat, the grass in the parks and squares was seared and blackened as if by fire, and the leaves of the trees curled up like scraps of tissue paper.

The Effects of the Heat

AND still the sun blazed down and the pavements blazed back, seeming to scorch the feet that trod on them as the sun scorched people's faces. Listless indeed were those passing feet—almost too listless to shuffle onward, were it not for the terrible urge to get somewhere—anywhere—out of the sweltering atmosphere.

It was the luncheon hour, which brought a brief respite from the drudgery of work and the tyranny of authority, both so much magnified in the torturing heat. The weary feet shuffled on, and presently there came among them a firmer, quicker tread. Some one was actually hurrying. Some one, strange to say, still had vitality enough to hurry.

A few of the shufflers turned and stared at Paul Feron as he strode up the avenue. He was a tall, good-looking youth in his early twenties. His shoulders were square and straight, his head with its thick, black hair was held high, his broad chest heaved, and his eyes flashed angrily. He was as heedless of the passers-by as of the fact that he wore no hat and that the sun was blazing down mercilessly upon his uncovered head.

A man caught him by the arm.

"What's the matter, buddy? Tired of life? Want to get sunstroke, goin' around like that?"

Free at Last

THE youth flung himself away, unseeing, unhearing, with the perspiration streaming down his face as he walked on and on. Only one thing mattered—he was free at last, free by his own act. For the first time since he had been in that unendurable office he felt himself a man again.

No more submission to that swine, Sellers! How he loathed the fellow! Paul had not wanted to lose his job, for jobs were hard enough to get; but Sellers was more than any one could stand. How they all hated the man, with his mean way of spying on his subordinates, his vile temper, and his cold, cruel insults!

Anyway, Paul was free of it now. What a hellish life it had been! He would not have stood it for all these months if it had not been for Beth. She had been so anxious about ways and means, and they had married on almost nothing but love and hope for the future. Such a pretty, little, soft thing, Beth, with her great blue eyes! He would endure almost anything for her.

Well, he had endured it for months—all the systematic persecution of himself and those about him, all the sneers of that fat slug, Sellers, with his small round head on his great unwieldy body. That's what he was—a human slug! His white face with the beady eyes, his sleek yellow hair, and the roll of flesh at the back of his neck—how Paul Feron had hated them!

Again a gate opened, and there, to the unutterable horror of Ferronius, was Vedia! She stood alone in the opening, her slender body trembling, but her head bravely erect, though tears were in her eyes and her lips quivered.

A Human Slug and Office Tyrant

AND to think of the injustice of that petty tyrant! Paul had hardly taken the job before Sellers began to pick on him. Anything he did was wrong, even if Mr. Barnes, the other partner, praised it.

If good old Barnes had not been away from town, perhaps the incident of this morning would not have taken place. Surely he would not have stood and watched Sellers badger poor little Lou Harding, shaking his fat hand in her frightened little face, framed in those big spectacles she wore.

Yes, things had certainly come to a head that morning. Lou had been crying over a slight mistake which had put Sellers in a furious rage. Paul Feron had looked on in silent indignation until he could stand it no longer, and then he had told Sellers just what he thought of him, two or three different ways. Lord, it was good to get it off his chest!

Sellers had been so astonished that his fat jaw dropped and his face turned purple before he pulled himself together and roared at Paul to leave the office at once. Any money due him would be sent to him, and he was not to apply to Sellers & Barnes for recommendation. Paul shouted back that he was glad to be fired, and that he would teach Sellers to behave himself before he finished. Then, somehow, he and Lou had found themselves out of the room, with Sellers smirking horribly at them from the door and Lou crying in gasps. . . .

Oh, how hot it was!

Paul stopped suddenly. He had reached the park, and there was a bench under a tree which invited him to its shade. He flung himself down with legs outstretched and hands hanging limp. Suddenly he felt terribly, overpoweringly tired.

Well, he had burned his boats. He would have to go home and tell Beth. She would be anxious, naturally, and she would be upset about poor little Lou Harding, too. Of course, Paul had to stand by Lou. Any man would—a thin, miserable scrap of a girl like that, working so hard and getting so little for it!

Beth and Lou—Lou and Beth—and Sellers. How Paul hated Sellers! How he loathed him and his cruel smile and his fat neck!

* * * * * *

THE SUN swung high in a sky of brass. Its burning rays penetrated even the purple splendor of the gold-fringed awnings over the seventy thousand perspiring people who sat or sprawled on the marble benches, gasping with heat and excitement, their dripping bodies swaying with the motion of the contests in the arena below.

The atmosphere was stifling, in spite of the perfumed showers that were projected intermittently over the audience. The stench that rose from the arena, the reek of the wild beasts, and the salty smell of blood, combined with the smothering dust and the sweltering heat, made the place almost unbearable.

The drought had lasted more than three months, and the country was suffering terribly. Fields and vineyards were sun-scorched wastes. In the cities it was worse, and worst of all in Rome, where the Tiber crawled, low and oily, its fetid banks exhaling miasma.

The Drought in Rome—The Arena

YET the Colosseum was packed for the celebrations in honor of the emperor's birthday. The populace had been promised a week of unparalleled entertainment, and the empire had been swept from end to end for sensational contributions. The strongest and fiercest lions from Libya had been procured, and a hundred malefactors, gathered from the dungeons of Rome, together with some twenty of the hated Christians, arrested on trumped-up charges of disloyalty were to be thrown to the ravenous beasts.

Among the spectators was the youth Ferronius. He was sitting beside the emperor his head wreathed with bays placed there by the great Titus himself. Was it only two days ago that he had leaped into the arena when Myrtilla the beautiful patrician maiden, had challenged the young nobles of Rome to encounter a lion single-handed? It had been a great fight, for the lion was a particularly ferocious brute which had already destroyed three of the emperor's bravest gladiators; but he had killed it, and he had been fêted and flattered ever since.

What a world it was! Only two days ago he was but a simple, unknown youth, albeit of noble blood, and to-day the excited people had shouted his name—"Ferronius! Ferronius!"—when he entered the emperor's box. This was fame, he supposed; but to him there was something sinister in that great crowd, panting with the heat and its own lust for blood. His glance swept the tiers of men and women anxiously.

Where was Marcellus? As official chief at the Colosseum, he should have been at his post by now.

Many eyes met those of Ferronius as they roved along the benches where lounged senators and magistrates and the fairest women of Rome. There were eyes curious and eager, and eyes soft and languorous; but he ignored them all. Even the alluring glance of Myrtilla, who, swathed in gold tissue with yellow lilies in her hair, reclined on the silken cushions near him, failed to thrill him. Perhaps it might have meant more to him were it not for the memory of a flowery hillside and a slender, white-clad figure, a little hand in his, a golden head resting upon his shoulder.

The Day-Dreaming of Ferronius

HE shivered slightly, and looked around again apprehensively. Marcellus was late, surely! Ah, there at last was the thick, short, glittering figure pressing toward the emperor, while the crowds muttered as he passed; for men feared and hated his power and his cruelty.

Now the manager of the show was bowing before Titus; but why did he not meet the anxious gaze of

Ferronius? Surely all must have been arranged as he had agreed! It was not much for Marcellus, with all his power, to accomplish—the removal of just one name from the list of Christians arrested, the smuggling of one slender girl from prison.

Had Ferronius only known what fame would be his for the mere killing of a lion, he would have gone to the emperor himself; but by that time Marcellus had received his bribe. Surely Ferronius had paid the contemptible creature liberally enough! Surely he must in a moment give a reassuring glance!

Ah, there at last he had turned and nodded! All was well, then. In the small, cold, narrow eyes of Marcellus there was a gleam of something like triumph; but he had nodded.

Vedia was safe—golden little Vedia, who, with her hand in his, had told Ferronius of Christ and of the new gospel of peace and mercy. What did it matter what she said, when her voice was so sweet, her eyes so blue? And now she must be safe, back in her home on the hillside, waiting for him, her lover, to come and take her away. Oh, he would go to-night, as soon as he could get away—Marcellus had nodded!

A roar from the amphitheater brought his thoughts back again. Marcellus had staged a duel between two gladiators who drove into the arena in chariots, and there was a heavy crash as the vehicles collided, each driver trying to upset the other.

The noise was terrific, with the splitting of wood, as wheels, poles and other parts of the shattered chariots flew in all directions; the screams of the injured horses, kicking and plunging in the wreckage; the hoarse shouts of the gladiators, on the ground, now, and lunging furiously at each other; and the yells of the audience, thirsting for bloodshed and impatient of the clouds of dust that partially obscured the combatants.

It was not a long fight, for one of the gladiators had been hurt in the collision, and he was brought down by a mighty thrust of his antagonist's heavy sword, which he was too weak to parry. Seventy thousand voices clamored for the death blow as the victor, with one foot on his fallen enemy's chest, flung up the hand that grasped the dripping sword, and turned questioningly toward the emperor.

Titus and Myrtilla—The Gladiator's Doom

BEFORE answering, Titus stooped to Myrtilla. Instantly she sprang to her feet, her lovely body gleaming through her golden veil.

"He was a craven!" she cried. "He fought ill!"

A turn of her thumb sent the unfortunate wretch to his end. How like a tigress she seemed as she coiled back on her purple cushions!

As she leaned forward again to smile at Ferronius, a new sound echoed through the vast structure—a wild, thunderous roar—the roar of hungry, maddened beasts. At a sign from Marcellus the soldiers had raised the gratings in front of the subterranean dens, and six huge lions had rushed out, fighting, snarling, leaping over one another, tearing up the sand in a murky smother.

They glared at the white faces that glared back from the seats above them. Maddened by hunger and by the wild shouts that greeted them, they sprang upon the low wall that separated the arena from the auditorium and clawed at the massive bronze railing that surmounted it. The soldiers, hurling missiles at the frenzied brutes, exasperated them to even greater fury. Marcellus stood there laughing, his fat white face distorted, his shoulders shaking.

The Sign from Marcellus

THEN, quite suddenly, he gave a sign. A further gate opened and a score of shivering, stumbling wretches were driven ruthlessly into the arena. Behind them the gate clanged to, and some of the Christians, stricken with panic, turned and clung to its bars, frantically beating at them and screaming in terror.

There followed an indescribable scene—a welter of shrieks and snarls, of struggles and mutilations, as the lions fought over their prey, their fearful, coughing roars mingling with the death cries of their victims and the exultant shouts of the multitude.

Once again the eyes of Ferronius sought Marcellus. The man was standing there, gloating over the awful pit, with his thick lips hanging moist and red, his small eyes glittering as his head protruded from the roll of fat at the back of his neck—more bestial, Ferronius thought, than the beasts themselves.

"By all the gods," he muttered to himself, "that man is the most loathsome thing in all Rome!"

Even as he murmured, Marcellus met his gaze for an instant. Then, smiling horribly, the director of the show turned and signalled once more to the soldiers.

Again the gate opened, and there, to the unutterable horror of Ferronius, was Vedia! She stood alone in the opening, her slender body trembling, but her head bravely erect, though tears were in her eyes and her lips quivered.

For a moment Ferronius was paralyzed. He thought that his heart must burst. Then a great cry of anguish welled forth from his very soul.

Vedia heard. She flung out her arms toward him, as he leaped for the railings; but even as he sprang, three of the lions were upon her, and the little white figure was blotted out by their tawny, writhing bodies as they tore at her. One long, quivering scream and it was over.

With that last cry ringing in his ears, Ferronius raced headlong to the gangway and leaped upon Marcellus where he stood, still smiling. No lion more quick or strong than the furious avenger as he pinned the traitor to the wall and seized his fleshy neck with long, sinewy hands—hands whose grip of steel had torn a lion's jaws apart but two days before.

Back and forth the two men rocked in a deadly embrace. Marcellus, struggling with the strength of desperation, dealt battering blows at his assailant, but

Ferronius never felt them. All the hatred of the world was in his soul, all the vengeance of the world in his strong hands. He felt only that gross, fat throat into which his fingers were boring.

The Battle to the Death

HE never saw the spectators rise from their seats, craning their necks, forgetful of the ravening lions and the little tattered heap of whiteness beaten and trampled into the dust of the arena, as they gaped wide-eyed at the unprecedented sight of a mortal combat waged close to the stately seat of the emperor himself.

He never saw the great Titus raise his hand, and Myrtilla pull it down, her cruel eyes fixed upon the fighters. He saw nothing but the flat, white face of Marcellus before him, now turning purple as the relentless grip about his throat grew ever tighter.

He did not hear Myrtilla's eager cry:

"Let be! Let be! 'Tis good to watch!"

He did not hear the yells of the people, the shouts of the soldiers as they threatened him with their swords, yet refrained from striking, in fear of injuring their commander, so tightly were the swaying bodies locked. He did not notice the sobbing, rattling gasps of the man whom he was strangling. He heard nothing but Vedia's last heartbreaking cry.

To and fro over the marble seats they thrashed and swung. At length the purple face turned black and the gross body sagged. With a mighty effort Ferronius lifted the limp, heavy figure high in the air and hurled it down—down among the lions.

And, as he did so, a shattering crash descended upon his head and darkness closed around him.

* * * * * *

A DAZZLING streak of lightning, a mighty clap of thunder, and Paul Feron, suddenly awakened, sprang to his feet with white face and staring eyes. What had happened? God, what had happened?

He pushed back the wet hair from his forehead as a hand grasped his shoulder and shook him roughly.

"Here, what's the matter with you, sitting out in the pouring rain?" a voice demanded. "Been drinking too much hootch? I've a mind to run you in, I have!"

The Heat Wave Is Broken

PAUL smiled feebly at the policeman.

"It's all right, officer. I was dead beat when I came in here. Heat got me, I guess. Thank the Lord for the rain!"

The policeman nodded.

"Yep, heat wave's broke at last, and just about time. There's more nutty people around the town than I ever saw before. Had about all I could stand of it."

He strolled away. Paul looked at his watch. He had been away from the office four hours. Incredible! Well, he must get back at once; but where was his hat? Surely he had it when he entered the park.

Then he remembered that there was no office to return to. What he must do was go home to Beth and tell her all that had happened.

How queer he felt! It seemed as if he was some one else—not Paul Feron at all. Well, that fearful pressure on his head had gone. He was wet through, but it was cooler, and that was the main thing, after all.

He hurried to the subway and caught a train uptown. Everyone was talking to everyone else, thankful for the blessed relief from the burning sun, and exchanging tales of the great heat wave which had broken at last.

They did not seem real to him, somehow. They were like people in a dream; but Beth would be real. He had a great longing to see Beth, to hold her close, close to him.

Up the stairs to his apartment he raced two steps at a time. At the sound of his key in the lock, Beth was at the door. She was as pale as death, and her eyes were red-rimmed.

"Paul, Paul!" she gasped. "Where have you been? I thought you weren't coming, coming back to me at all. I thought you had—"

Paul laughed as he held out a wet arm.

"Just taking a rain bath in the park," he explained.

"Oh, Paul, don't you understand—about Mr. Sellers? You shouldn't be here!"

"What do you mean? I don't know anything. I've been sitting in the park for the last four hours."

"But, Paul"—her voice wavered and broke—"you were seen coming out of the office just an hour ago, they say, and your hat was there in Mr. Sellers' room. He was found strangled—choked to death! And oh, Paul, Paul, the police are here waiting for you!"

He stared at her with dawning horror in his eyes.

The End

Announcement!

The next *Amazing Stories* will be the October 1933 issue—on sale Monday, September 11th. The current combined August-September issue will remain on sale until the new number is released.

Watch your newsstand for the October *Amazing Stories*—it will contain many unusual, thrilling stories: "When The Universe Shrank" by J. Lewis Burtt; "The Men Without Shadows" by Stanton A. Coblentz; "Whisper Of Death" by Harl Vincent; and a host of other interesting tales.

Remember, the next issue of *Amazing Stories* will be on sale Monday, September 11th. It is worth-while waiting for!

Amazing Stories

What Do You Know?

READERS of AMAZING STORIES have frequently commented upon the fact that there is more actual knowledge to be gained through reading its pages than from many a text-book. Moreover, most of the stories are written in a popular vein, making it possible for anyone to grasp important facts.

The questions which we give below are all answered on the pages as listed at the end of the questions. Please see if you can answer the questions without looking for the answer, and see how well you check up on your general knowledge of science.

1. What is the name and nature of the tree producing vegetable ivory? (See page 410.)
2. What is the principal use of vegetable ivory? (See page 410.)
3. What is the Great Magna? (See page 423.)
4. Can you describe the Canyon Diablo in Arizona? (See page 423.)
5. Have borings in the Canyon given any suggestions or revealment of its origin? (See page 423.)
6. What is its origin attributed to? (See page 423.)
7. Can you give an example of an abnormal specific gravity of a star? (See page 423.)
8. What is the estimated increase of temperature with increased depth of penetration into the earth? (See page 424.)
9. How can snow be converted into ice and what is the name of the action? (See page 424.)
10. Give one view of the possibility of the presence of air in space. (See page 431.)
11. State figures for converting feet, miles, meters and kilometers one into the other. (See page 435.)
12. How could the survival of the fittest operate? (See page 442.)
13. Give an abstract of the leading features of the famous work of Mendel. (See page 442.)
14. Is it conceivable that acquired characteristics might affect inheritance? (See page 442.)
15. What similarities can be drawn between carbon and silicon? (See page 457.)
16. Can you give a definition of life from the standpoint of matter? (See page 461.)
17. What element is the basis of life? (See page 461.)
18. What is the origin of the term "organic" chemistry? (See page 463.)

DISCUSSIONS

In this department we shall discuss, every month, topics of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine. In case a special personal answer is required, a nominal fee of 25c to cover time and postage is required.

A Letter from the Author of "The Tomb of Time"

Editor, AMAZING STORIES:

I wish to reply to Mr. Clifton Amsbury's criticism of "The Tomb of Time" in the May issue. It seems that Mr. Amsbury, with all respect due his praiseworthy desire for truth, even in fiction, has confused the absolute of empirical science with the elastic theorizing of science fiction. If any science fiction writer were to meet the implied demands of cautious and slow-moving science, the pages of AMAZING STORIES would come to us almost entirely blank. There would be rare and occasional paragraphs tediously describing the fossilized claw of a remote batrachian, paragraphs abstrusely indicating that the moon might possibly have a trace of atmosphere, paragraphs listing the new stars (or rather old ones not hitherto discovered), and all ending in a huge and spectacular question mark, which means in cold type that scientists, for all their concentration upon one field, for all their years of patient, unflagging experiment and classification, can tell us exactly nothing!

Let me take up Mr. Amsbury's letter in detail, and thus include all those criticisms which he did not mention for fear of making his letter "too long."

I wish gently to remind Mr. Amsbury, and any who have been misled thereby, that the words "prehistoric" and "primitive" are not terms, but living words in the English language. "Prehistoric" may indeed once have been a "term," but it is no longer a term any more than "electricity" is a term in rhetorical usage. And the word "primitive" never was a term; it came into existence before Haeckel and Darwin immortalized prehistoric man. Therefore, how these "terms" could have been confused it is impossible to understand. They were not confused any more than "red" and "crimson" can be confused.

As for "the human species in a reptilian stage of evolution." Right here, my dear Mr. Amsbury, is where I clutch wildly at the ancient moss upon your evolutionary erudition. The creation of any species has almost never been direct in biological lineage. The reptilian species is older than the ape species; fish and reptiles antedate the lemurs; therefore, oh, ye gods of science fiction and ye critics thereof! why could not the ape type have been mingled with the reptile in a lost root of our lineal descent? The greatest of anthropologists know nothing but fragmentary snatches from the history of our kind, and even Mr. Amsbury could not deny that Nature might have made just one or two mistakes in creating us—and one of these mistakes was discovered in "The Tomb of Time."

Now, regarding, the American archeaopteryx: this is a name given the fossils of the hesperornis, which I am sure Mr. Amsbury knows intimately. Not all scientists call this prehistoric, American bird by this name, but some of them have, and I may, even if no one ever called it that before. I may because Mr. Amsbury could call a puma an American lion, if he liked, and no one could justly criticize him for it!

As to the description not checking: the pterodactyl, or pterosaur, and the hesperornis represent two types of winged reptiles, one (the former) large, the other small. But the form of reptile flying creature I used was gigantic in proportion to each: I referred to general appearance, not to specific details, and I used the only well-known forms in association. "Halfway" means an intermediate form; it was the simplest way of saying it, and when a man says "halfway to town," he does not mean that by Mr. Amsbury's micrometer it is halfway. Moreover, all scientists are uncertain as to the exact appearance of these "birds"; they have re-created them from fossil remains, and as a matter of fact, Mr. Amsbury cannot check anything in paleontology, least of all a fiction description as general and implicative as was mine. Now, please, please, do not choose fists, Mr. Amsbury, because my arms are short!

I doubt if any science fiction writer can be an absolute authority in every field of which he writes; on the other hand, we who have read much, doubt if any scientist now living, least of all any dead, can be said to be an absolute authority in his field: there are too many good men who disagree with him, and the branches of his own science are far too complex for him to grasp it all. In conclusion, there are too many critics ready to use a peck of knowledge in order to measure a bushel.

Richard Tooker,
Bismark, N. Dakota.

(The first paragraph of your letter depicts the troubles of an Editor of a Science Fiction Magazine. He has to strive to make it scientific; to deal in accurate science except where some hypothetical future is assumed. If it was restricted to the absolute condition of things in this world of ours, the highly imaginative interplanetary stories, which are favorites with our readers, and which are written by some of our best authors, would be on the prohibitive list, which would be a misfortune. The rest of the letter by this distinguished writer, tells its own story so well and presents so good a picture of science fiction and its requirements that we cannot undertake to add anything to it.—EDITOR.)

A Paradox, Inconsistency or a Mistake in a Story?

Editor, AMAZING STORIES:

As I live in a very outlandish spot, it is only occasionally that I can obtain a number of AMAZING STORIES and at that it is several months old. I wish to obtain some back numbers from about 1924 and wish you would put this letter in your Discussion column as many of your readers may have a stack of old numbers and would like to correspond with me. In your November number for 1932 the story. "The Man Who Lived Twice" I found a nasty mistake. It is stated that the second pill ball existed before the first, if that is so how did the gentleman who was subject to the experiment come back to life in his first being, if he was killed in the second, which according to Mr. Kober existed first? Perhaps he can explain that.

K. Nixon,
b, Weasenham Lane,
Wisbeck, Camb., England.

(It is hard to believe that any place in England is outlandish. There should be no trouble in your getting AMAZING STORIES regularly. We will leave the answer to your criticism on "The Man Who Lived Twice" to the author, who will doubtless read this letter.—EDITOR.)

A Very Complimentary Letter from England

Editor, AMAZING STORIES:

A lot of discussion has arisen among A. S. readers over the conflict between Miss Robb and Dr. Smith, so much so that I do not want to stress the issue between these two, but viewing the use of slang from a broad point of view, I certainly feel that it is a pity you should spoil our magazine with what is, after all, not good English—namely slang.

A. S. is certainly not to be classed with the cheaper sort of literature, which I believe (I may be wrong) you call in America, a "dime-novel."

Bad habits are always easy to acquire, and considering that the way in which we talk is so largely influenced by what we read, it is in the interest of all that literature should be kept as high-toned as possible without becoming too high-brow.

Unfortunately in England we get a number of publications which contain stories of a rather smutty type (I hope that is not too slangy) and these books are somewhat similar in appearance to A. S. and any decently minded person picking up a copy of our magazine is not likely to be favorably impressed by finding slang.

However, I enjoy Dr. Smith's stories, and would not miss them on any account,

although I think I should award the palm to John W. Campbell, Jr. I have read a lot of science fiction, and I certainly think AMAZING STORIES is the best.

J. L. Winterbourne,
56, Sotheby Road,
Highbury, N. 5,
London, England.

(Our correspondent on the other side of the Atlantic alludes to the famous Robb-Smith controversy which must have possessed much merit to have elicited letters over so long a period. The American Dime Novel was a very definite publication of short novel length stories that used to sell for 10c apiece. A complete collection of Beadle's Dime Novels would be worth a great deal of money. There is one collection which I believe is complete and is in existence now. Some quite good authors were among the contributors and there were a very large number of them published. There is very little slang really given in our magazine and we are scrupulously careful about what may be termed morale. —EDITOR.)

A Desire for More Variations in Cover Designs

Editor, AMAZING STORIES:

I have just finished reading your May issue and I feel it my duty to send you a few comments on it. The cover is clever, but for heaven's sake don't have the same type of cover all the time. I can't tell one issue from another. As to artists, Morey is far above the others. However, please tell Morey to be a little more careful to give an accurate picture of what is described in the stories. A. Hyatt Verrill has good plots and he knows how to put them down on paper. Keep feeding us his stories, we like them. Jerry Benedict made a rather good entrance. His story was interesting as he has a style of his own.

A word about the Discussions Columns. I have just finished reading a letter by Floyd E. Anderson, in which he slanders the story "Delilah." He also states that this story has no scientific basis. I disagree strongly. I say give us more of these stories. Interplanetary travel sometime in the future is a fairly assured thing. Ray-guns and weather-regulators will be invented. We can be fairly certain of that, but stories that open new roads for thought are the things we want, not certainties. It is for this reason that A. Hyatt Verrill's "The Death Drum" particularly tickled me.

If you don't make any changes in artists or the type of stories you run, AMAZING STORIES will still be the foremost science-fiction magazine, and here's hoping for that.

Barbara V. Cammen,
529 W. 111 St.
New York City.

(We find ourselves again favored by a letter from one of the fairer class of humanity—it is our good fortune to be supported and encouraged in our efforts by members of your sex. It is an interesting fact in natural history, that it is only an abnormal woman who can throw a ball or stone with any degree of success. We are glad to say that the same applies to brickbats thrown at the unfortunate Editor—that seems to be left to the cruder sex. So you can understand why we like to get letters from such correspondents as yourself.—EDITOR.)

An Objector to Sub-headings, But Who Submits to the Use of Larger Type

Editor, AMAZING STORIES:

I've never written to you before, because I've never had anything to say. I've been reading AMAZING STORIES since the first issue and have never had any real cause for complaint. I've enjoyed a majority of the stories, never saw any reason to kick about the illustrations, and was never ashamed of the cover designs. They were always satisfactory, even though they varied slightly in quality—and I'm not kicking about any of that stuff now.

But I certainly have something to kick about—and I'm kicking like a steer! I can't read AMAZING STORIES any more without getting as sore as a boil. That may sound funny, but it's a fact. I'm kicking because of those sub-titles you're sprinkling through the magazine with such lavish generosity! We read three paragraphs, then: "Locating themselves in the New Space." Twenty lines more, and we come to: "A Glib Lie Well Told" —or "Arrival of the Police"—"Discussion With the Bandit"—"A Parachute to Save the Two Travelers"—or something else equally obvious!

We don't want to be told that! We're reading the story to learn that stuff! And we don't want it outlined beforehand! I've counted as many as five of them on a single page of approximately 1000 words.

Your reasons for ruining the magazine are obvious. You're doing it to use up space—space that doesn't have to be filled with stories. And I don't blame you one bit for wanting to do it. I know a depression has hit the country, but that isn't any reason for spoiling the best science fiction magazine on the market. At the most, you don't save more than four pages of print. Why not leave those four pages blank at the back of the magazine, and win the undying gratitude of thousands of long-suffering readers?

You've raised the type-size from eight point to ten, and I won't utter a single squawk against it. I don't even object to your spreading the Editorial and Discussions to three times their former size. But for Pat's sake cut out those infernal headings, or you'll lose at least one reader! I'll be dog-gone if I'll continue to read a magazine that makes me lose my temper from three to five times on every page!

Be a sport and print this to see if there aren't plenty of other readers who agree with me.

H. D. Spatz,
244 Jameson Place,
Reading, Pa.

(We have used a larger type than formerly, thereby making the magazine easier to read and certainly improving its appearance greatly. The Discussions in the old six point type, in which some of them still appear, were rather trying to the eyes and we feel that in increasing the size of type in the stories to twelve point we have done a good thing. Certainly AMAZING STORIES looks much better than it did. We are glad to print your letter and wonder if our doing so will bring us under your sport classification.—EDITOR.)

Congratulations and a Criticism of the Cover Pages

Editor, AMAZING STORIES:

I've been reading AMAZING STORIES since it made its debut way back in April, 1926. Congratulations upon your grand and glorious seventh birthday. I have a number of back issues on hand which I will be willing to sell to prospective buyers.

Now about the new cover. If you want my opinion of it, I think it is the rottenest change you could make in the magazine. The old covers may have been bad although I liked them, but, the the new covers are positively disgusting. *No me gusta.* Perhaps you could take a vote on the new covers.

Steven Fogaris,
157 Fourth Street,
Passaic, New Jersey.

(We thank you for your birthday congratulations. The cover question in our magazine is one to which it is hard to get an adequately satisfactory answer from the public. Some of our readers think that it decreases our circulation, yet this very type is approved of highly by others. We have published a number of letters on the subject and the balance seems inclined towards the new covers. A very curious theory has been brought to our attention to the effect that people were ashamed to be seen with the old covers, but as each of the old covers in all their color definitely illustrated an episode in one of the stories in the magazine, there should have been no question of shame about them.—EDITOR.)

A Suggested New Word for Science Fiction Stories

Editor, AMAZING STORIES:

I have always considered the word "scientifiction" an awkward and cumbersome term, and I am glad to note that you have eliminated it from AMAZING STORIES. With the present trend toward simplification in both written and spoken language, a polysyllabic hybrid like "scientifiction" was decidedly out of place in this progressive magazine.

However, there is no denying the need of a single, handy word to designate stories of the type generally known as "science fiction." The latter term is quite satisfactory as a general descriptive classification, but it cannot be readily applied to individual stories. Thus, any yarn in this magazine, taken by itself, can be described only as a "science fiction story" or a "work of science fiction." Both these expressions are rather

unwieldy in construction and ill-adapted for popular use.

To overcome this difficulty in terminology, I should like to offer a word of my own coining—"SCIENTALE." It is brief, self-explanatory, and easily pronounced. And it fits naturally into a sentence; e. g.: "The Time Machine is my favorite scientale."

I do not suggest that this word be used as a substitute for "science fiction," but rather as an alternative. So used, it would serve as a convenient synonym and thereby avoid circumlocution or repetition.

I realize, of course, that a coined word such as "scientale" has certain limitations and disadvantages; but it does fill the need for some such designation.

Whether the term would prove acceptable for general use depends, in a large measure, on the reaction of your readers, who constitute the élite of science fiction's followers. Perhaps some of them can suggest a better word than "scientale" in this connection. In any event, I commend it to their consideration.

Allen Glasser,
1610 University Avenue,
New York, N. Y.

(We are glad to hear anybody reject the word scientifiction which we would like to eliminate from the users of the English language along with the use of the word "intriguing" instead of "interesting." Individually we think science fiction is a good expression and we are almost sorry to see the desire to create a new word, which is not a necessity. The English language has enough words as it is. Your letter may bring out opinions *pro* and *con*.—EDITOR.)

A Reader Who Prefers Text to Pictures

Editor, AMAZING STORIES:

I have been a reader of AMAZING STORIES for approximately seven years, but until the last four or five months never read the Discussions. I don't know how long the debate about who can draw the best pictures has been going on. It sounds like a bunch of ten-year-old kids; one of them likes Andy Gump, the other Geo. Bungle and still another likes Bringing Up Father. Why all this debate about who can draw the best pictures—be it Paul, Wesso, Morey or Sigmond, and if they were old readers they would have Briggs in it also.

I would like to suggest to these readers who want a lot of pictures, that, if they are too dumb to understand what they are reading without having a lot of pictures, let them read the comic strips in the daily and Sunday papers. Or better yet, you might keep on hand a lot of A.B.C. books where they have a picture explaining everything that is printed below it. From the looks of the letters, you should have a big demand for these picture books.

If it were up to me there wouldn't be any pictures at all, except the cover, and the space taken up by pictures would be filled with something to read.

J. H. Link,
Granite City, Ill.

(A great many books are published which are supposed to be of a popular type and which the publishers feel can attain the dignity of a best seller without any pictures. But we find, and you will find it also if you will go over the letters which we are publishing, that many of our correspondents are inclined to criticize our pictures, evidently esteeming them of importance, judging them favorably or unfavorably, and name their favorite artists and sometimes detect an error in the delineations. We presume that we acknowledge ignorance when we say that we have no knowledge of who Andy Gump or who Geo. Bungle is. In this letter you put your private views ahead of everything. Do you realize that an Editor has to subordinate his own opinions in many cases to those of his readers? The majority of our readers we believe want pictures and we want to please them.—EDITOR.)

A Nice Letter from a Very Young Reader

Editor, AMAZING STORIES:

This is the first time I have written a letter to your Department and I hope to see it in print. Here is something surprising, I am only 11 years old and have just begun to read AMAZING STORIES. I am interested in Science very much. I think the following were the best stories in recent issues:

1. "Martian and Troglodyte"
2. "Three Suns of Ev"
3. "The Death Drum"
4. "Jeremiah Jones, Alchemist"
5. "The Girl and the Glacier"
6. "The Bronze Door"

And last, but not least—Discussions.

I would like to read more stories of the Universe than you now print and caveman stories. I think that it would be good if you made a Department of Science Questions and Answers like they have in * * * Stories Quarterly. I would like to get hold of some back issues of AMAZING STORIES. Please write to me, somebody.

Lawrence Antonellis, Jr.
Elm Road,
Falmouth, Mass.

(This correspondent is a very young reader, and we are very proud of such. This letter is short, but entirely to the point. Brevity is said to be the soul of wit. Your selection of best stories is very good. You will have stories of the Universe and of cavemen. We will take into consideration the questions and answers department. For back numbers write to Subscription Department, Teck Publications at this address.)

An Interesting View of Science Fiction by a Writer Who Thinks

Editor, AMAZING STORIES:

The letter of James C. Greyville seems based on a fallacy held by most folks (I have even caught myself indulging in it at times) and in his case aggravated by his chosen field of work. It is a truism that a scientist knows less about science-in-general than the average college student, because while he may know all the fly specks in one corner of the total field of science, he knows nothing at all about the other corners, much less about the wide expanse of the full field. And now for the fallacy, the idea that the word "science" is identically similar in content and meaning to the phrase "physical sciences." It is true that these are older and more stabilized than the biological and social sciences, but even they are not accurate. And Mathematics, often hailed as "the only exact science" is not a science; it is a system of logic.

And now let us examine the sciences in the January, 1933, "A. S.":

1, "The Treasure of the Golden God": Geography—excellent in that it goes as much into what is not known as what is known; Ethnography—ditto, but more is known; Archaeology—not so good, there is nothing to substantiate Manoa, but the El Dorado myth and that is scattered all the way from the Rio de la Plata to the Colorado River.

2. "Pool of Death": Biochemistry, chemistry, biology—all excellent; Psychology—good and practical.

3. "The Last Earl": Folklore and a little of Mr. Greyville's beloved physical sciences. Also psychology.

4. "Delilah": Psychology—(a) Somnambulism, (b) misplaced mother-love and jealousy.

5 & 6. "Radicalite," and "Omega, the Man": Of which Mr. Greyville has something good to say. But "Omega" falls mostly outside my definition of science fiction by omitting to explain its defections from known science. I approve of "revision," but not "violation" of known science by science fiction.

Mr. Greyville, I noted, even before his closing lines, is living in the past. He insists that science let alone those subjects most vital to human life: the sciences which tell about us and the world and our interrelations therewith. Science fiction long ago reached a point of relative saturation as far as stories dealing with the physical sciences go, and settled down to a series of "wild west thrillers with rays instead of lead and rocket-ships instead of broncs" as one disgusted reader put it. And if keeping up that sort of thing is maintaining a high standard, Mr. Greyville is welcome. Certainly, however, a magazine which has witnessed four or five sudden changes of policy cannot be justly claimed as carrying out consistently the original policies of AMAZING STORIES. And I notice a lot of authors switch to A. S. after building up a following elsewhere.

And notice down in the next corner Vance Haynes objects to "physiological" stories. Odd, when they have been lacking for so long.

The letter from Richard Rush Murray just goes to prove the old crack, that, by the time anything gets into the textbooks, it's so out of date it might as well not be put in.

The old squawk that stories are degenerating makes me laugh. Just go back and try to get the same enjoyment out of some of the old classics that you

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"A short, stabbing jet of flame leaped from the loose blanket over Dustin's arm. A flat, smacking report like the noise a plank makes in falling on quiet water jarred the desert night. A little skirl of white smoke eddied from the end of the blanket, and old Kane—old and very wise Ulysses of the foothills, sank to his knees and slowly rolled over on his face while his claw-like hands worked convulsively. Then he lay still!"

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Stomach Disorders Threaten His Life Says N. Y. Patrolman

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DAVID R. CALDWELL

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did when they first came out. A fellow out in Portland got hold of his first A. S. rather lately and started working back, the more recent numbers being easier to get. He rates the older stories as not so good as the later ones (which he read first) with the year the magazine changed editors, as especially low. But that year is a special case anyway.

Floyd Anderson's advice to Jack Darrow seems entirely unnecessary. I can't say as to love-story magazines, but Jack sure does get into all the weird and mystic magazines in a way which implies he reads 'em. And as I mentioned before, science covers more than the qualitative analysis of atoms and molecules and their reactions with each other. It also concerns the interrelation of the various materials and entities built up thereby.

Many of the "future stories" depict a communistic society. How about a story of the time when the dielectric (the idea that every society contains the seeds of its own decay) has operated upon Communism and it is going over into a brand new sort of society. It would first probably be necessary to have a new invention fundamentally affecting the economic system as the automatic machine has upset our ancient scheme of things.

Clifton Amsbury,
121 S. 17th Street,
Lincoln, Nebr.

(You speak of our magazine having suffered four or five sudden changes of policy. We do not know where you will find indication of these changes. Perhape the principal difference between the present issues and the very early ones is that we are giving much more space to Discussions than formerly and that this part of the magazine is becoming a more important feature than ever. We know that our readers like it and we are in hopes that this division will continue to be as popular as it is now. —EDITOR.)

The Cosmos Science Club

Editor, AMAZING STORIES:

I wish to announce to the readers of AMAZING STORIES, the formation of the Cosmos Science Club of America.

The club has been organized to help in the drive to advance science and science-fiction and to promote friendship and closer ties between lovers of the two.

The club publishes a paper (as yet in its infancy) temporarily called the Radiagram and accepts articles on science and science-fiction from all members. The benefits of the club are many and we wish to extend them to the readers of this magazine. Readers wishing to become members, please address your communications to Mr. Edward F. Gervais, 512 So. Pennsylvania Ave., Lansing, Michigan; Mr. Walter Kubilis, 406 Onderdonk Ave., Ridgewood, N. Y., or to my own address. They will be immediately forwarded to club headquarters.

John B. Michel,
Associate Editor,
The Radiagram,
1094 New York Ave.,
Brooklyn, N. Y.

Mr. Campbell and Science Fiction

Editor, AMAZING STORIES:

Mr. Campbell's reply to my letter is quite interesting where he compares himself to a magician trying to divert the attention of his audience from questionable operations. Perhaps he is justified in his attitude, for in his own case it certainly seems to supply a tremendous amount of the imaginative element which is needed so badly by the average author. Several of us, however, are depending on science fiction for a large part of our scientific education and so would like to have as much known science in the stories as it is possible to insert without detracting from their interest.

Mr. Campbell agrees with me that the molecular motion drive will not work in a vacuum, and it follows immediately that the elementary form of the machine would also fail to work in the atmosphere; but he is going to make slight changes (if I understand him correctly) so that he can have a thrust against the air but still retain his old source of power (the kinetic energy of the molecules). Now let us assume that the machine works and suppose we make it run a dynamo which in turn runs an electric heater, a small part of the electricity being side-tracked for the use of the molecular motor itself. Then we have a self-acting machine conveying heat from one volume of air to another at a higher temperature, thus violating the second law of thermodynamics. It is true that the truth of this law is established by the correctness of the many deductions made from it and by those alone, so perhaps we should allow Mr. Campbell the privilege of denying the law when it is to his advantage to do so.

I wish to agree whole-heartedly with Mr. Campbell in his view of the usefulness of "The Gravity Control School." Although I do not think of gravity as having any connection with "curved" space, I believe that it will some day be one of our most important sources of power unless the necessary apparatus proves to be too massive or complicated for practical use.

Marvin G. Moore,
206 N. Harvey,
Urbana, Ill.

(We often have to say that a letter speaks for itself, and this is one of them. We leave it to Mr. Campbell's consideration.—EDITOR.)

Back Numbers of AMAZING STORIES Available

Editor, AMAZING STORIES:

Please print the following message in the Discussions Columns of AMAZING STORIES.

Any reader seeking back numbers of AMAZING STORIES can get them by writing to me. Please state what copies you want. I have copies from 1926, 1927, 1928 and 1929.

Frank Soltis,
5313 Washtenaw Avenue,
Chicago, Ill.

(There is constant demand for back numbers. You will hear from our readers.—EDITOR.)

Back Issues of Science Fiction Periodicals and Literature for Sale

Editor, AMAZING STORIES:

I am disposing of an entire library of scientifiction, including all scientifiction magazines and containing a complete set of AMAZING STORIES with a number of extra-copies.

Linus Hogenmiller,
502 N. Washington,
Farmington, Missouri.

The Old Story Repeated—Action and Reaction Are Independent of Atmosphere—A Rocket Does Not Move by Pushing Against the Air

Editor, AMAZING STORIES:

Would you please explain how a "Space Ship" would be propelled through the Ether or the so called "Void"?

Would not one force have to "push" upon another to make the object move, that is out in the vacuum?

If space or vacuum as it is termed, is void of any material whatsoever then how would the object be made to move?

Doesn't vibration have a great deal to do with the motion of an object?

As we know the vibration of a bomb will demolish everything within its radius, then would not vibration play a great part in the motion of a space ship?

Would you be kind enough to explain this phenomenon to a most interested reader of your magazine?

I think the scientism of AMAZING STORIES would inflame a fertile mind to scientific action.

I would be more than glad to make an acquaintance through the mails with any one who would like to correspond with me. I am very much interested in all branches of science and would like to exchange ideas with some of the A. S. readers.

Wishing you every success with your magazine,

Jack I. Long,
200 W. Ormsby,
Louisville, Kentucky.

(Rocket propulsion is due to Newton's Law, as it is termed, of action and reaction. A rocket will go faster in a vacuum than it will in an atmosphere. The gas from a rocket is driven out from one direction which we may call action and the rocket is driven in the opposite direction, which may be called reaction. There is no question about air or anything else for the gas to "push" against. It is hardly correct to say that a bomb operates by vibration. It operates much like a tremendous blast of air, a concentrated tornado. We are glad to publish letters like yours in which the writer asks to have other interested people correspond with him.—EDITOR.)

An English Critic of the Recent Covers —He Prefers the Illustrative Kind

Editor, AMAZING STORIES:

May I exercise the readers privilege to throw an occasional brickbat with the bouquets? I do *not* like your present covers. In looking back through some of the earlier numbers one finds really excellent cover designs, which, in addition to being worthy illustrations of the stories they represent, must also have had a considerable sales value from a publisher's point of view—they drew the eye irresistibly by the boldness of their conception and the skill of their execution. Contrast these with the present covers; absurd splashes of color suggestive of a cubist's nightmare. A badly drawn cylinder of a poisonous blue shade, floating in an equally poisonous blue void, does not suggest space-travel to me, and as for blue and red dragons—I've a slight preference for pink elephants. Please don't do it, it may be quite the thing for some magazines to display "art" covers, in which the élite are able to catch a glimpse of the thing the artist's soul is striving to express, but it just does not go with Science Fiction. Just take a look at some of the old covers (Paul knew what a cover should be) and make the outside of "A. S." worthy of the inside.

L. A. Kippin,
Linota, Perceval Road,
Romford, Essex, England.

(AMAZING STORIES, as you will observe, has in a degree returned to the old illustrative covers. There have been some of the most curious criticisms made about them, many people objecting vigorously to them. We are going to try the illustrative system once more on a somewhat different basis, and will be interested in any comments that we receive from our readers.—EDITOR.)

Larger Type Approved Of—Notes on "The Last Earl"

Editor, AMAZING STORIES:

I would like to comment upon a subject which I do not think is discussed by your readers. It is something which has nothing to do with the stories (which are very good), or the cover. I am referring to the size of type of the Editorials and the Discussions column.

Now I have not poor eyes, but it certainly does strain them to squint at the small print of the Editorials. Take your March issue, for example. The editorial was very interesting and certainly instructing. But the print! After the first couple of paragraphs, my eyes began to grow tired, and I had to rest them.

In your April issue, however, I noticed that you used larger print, that certainly was easier on the eyes. In fact, I noticed that even in the main part of your magazine the type was larger, but I have no criticism of that print prior to the April issue. I certainly was pleased when I came to the Discussions and found the print larger than before. Let any reader take an earlier issue, turn to the Discussions column, or Editorial, and then pick up the April issue. The difference is readily seen.

But here comes the brickbat. I was sailing along fine, until I came to page 94 of the April issue, and then down goes the print again! Don't think I am the only one. I know lots of A. S. fans who notice this point and object.

But let me say here that your stories are fine, and I certainly do appreciate them! But one story seemed out of place in A. S., and that was "The Last Earl,"

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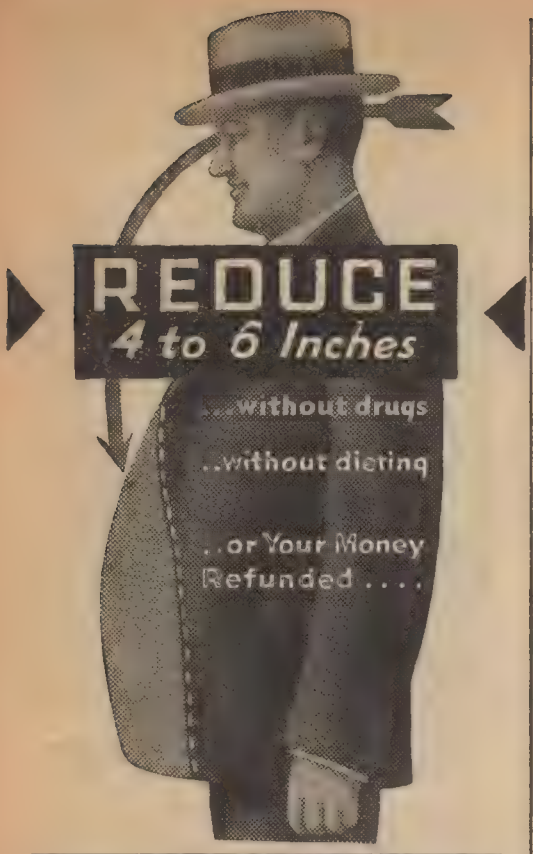

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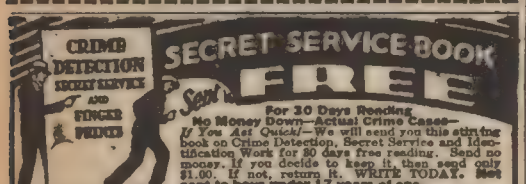
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that appeared recently in your magazine. I am inclined to agree with the writer (J. B. Michel) in your March Discussions, who says that this type of story does not belong in A. S.

It was a good story, and well written, but is out of place in a scientific magazine.

Strode H. Kern,
1917 Taylor Road,
East Clevland, Ohio.

(The opinion of our Editorial Staff is that the larger type is a great improvement—it makes the reading much easier and also gives a handsomer page. The 6 point or small type will appear for a small portion of the Discussions as a sort of accident and after this issue very little of it will be seen, but we want to use up what we have. Your criticism about the "Last Earl" has been dealt with in previous Discussions letters.—EDITOR.)

A Congratulatory Letter

Editor, AMAZING STORIES:

Fine work A. S.! My congratulations! You certainly are weathering this depression in great style; which is a great deal more than can be said of the other two science fiction 'mags' which formerly shared a place upon the newsstand along with you. One has been discontinued altogether, while the other one has reduced its price and its size as well.

Sigmond's modernistic cover on the March issue of our 'mag' is by all odds the best yet. In my humble opinion it is the most attractive illustration to grace the cover of A. S. since its inception way back in the pre-depression days—1926 A. D.

"Stallion's Trappings" reminded me very much of "The Fighting Heart" by W. Alexander which was published in February, 1928. Both of these stories made entertaining reading. I think that on the whole, most of the stories you print are quite good with an occasional bad one skipping past ye Editor's eagle eye. However, there is no complaint coming from these quarters as long as the general excellence of our 'mag' keeps up as it has in the past.

Robert Tufts,
61 Rathbun Avenue,
White Plains, N. Y.

(It is a comfort to receive such letters as this. We want our readers to be our friends even if critical letters, which may also be from friends, presumably add spice to the Discussions.—EDITOR.)

A Correspondent of the Fair Sex Takes Up Various Subjects, Among Others, Letters in "Discussions"

Editor, AMAZING STORIES:

This letter of necessity, will be long but I don't think it will be wearisome. You see, five times have I composed letters to you—five times have I discarded them, but I believe this one, about the April issue, will reach its destination.

First, a comment on the stories. "When the Comet Returned" was no doubt good, but a trifle drawn out for the strength of the plot. "Beyond the End of Space" was excellent in both parts ending exceptionally well. "Ancients of Easter Island" far fetched, but good reading. "Memory Stream" will pass. Concerning "The Phantom of Terror" only one thing registered—that it was (though good) a detective story. "Universal Merry-Go-Round" could have been handled better but I liked it.

Now for the real object of my letter—Discussions. Allow me to be different and comment on the letters, too.

I feel confident Frank Kelly's letter was not written for the sake of seeing his name in print. He *meant* it. Bernard Jaffe is in the same class with Mr. Kelly. I skipped the Caldicott and Waite letters after the first couple of paragraphs, they became too involved even for me. Hooray! A letter from one of the fair sex. I am glad Miss Drye wrote, but she says " six or seven years ago my mother thought me some kind of a lunatic." My mother's that way now.

Both of Forrest Ackerman's letters amused me. He sounds interesting. Day Gee is, to say the least, sweeping in his remarks. Bill Parry's letter was short, neat, and adequate. Jack Darrow used to be entertaining but now he sounds like a catalogue, or some kind of adding machine. I like Dr. Smith, too, Mr. Chadford, but not so much as Harl Vincent. George Cook, I'm positive that we still need (?) proof that the world is round, however, the rest of your letter was interesting. Thanks, Dr. and Mrs. Melvert, your letter speaks for itself. Sorry, you don't like Sigmond. I'll grant that Morey is good, but Sigmond is different—new—symbolic., Mr. Wyman. Virgil Luis Van Over's is the kind I

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like to see but I'd like to know where Mr. Heavyside gets the "we" stuff about reprints. I can't answer Emil Petaja except with a proposition of my own. I will trade a March, 1933, issue (of which I have two) for an October, 1932 number or the Spring-Summer Quarterly which appeared in January, 1933. Maybe, Mr. Huffman, your letter will make some of these professional throwers of Irish confetti think twice. I hope so. Joe Skidmore's letter did not chime in with thought-provoking "Souls Aspace." Maybe he is showing us another and more lively side of his nature. It would not take up much room, would it, to put the date at the head of each letter? Otherwise I get so mixed up. The reason for this letter being a month behind is that, though I have my May issue and have glanced over the titles (which look good), I loaned it to a sick friend. He likes them too. I couldn't resist the "Girl in the Glacier"—excellent.

I have more pet peeves: The first to be aired is: that bothersome habit of telling what is going to happen in all-inclusive headings for each paragraph and it is just as bad on heading the letters in Discussions. I like your comment at the end, but the headings remind me of nothing so much as flies or mosquitos or what have you.

Another is the index page. Why not do away with—"In the Next Issue." That wet blanket prophet! Substitute a page of jokes—no, science is above jokes. Well then, a character sketch of an author per month. I don't like to be told ahead that they built a parachute and landed safely. I would rather have it come as a surprise.

I would welcome letters if the writers keep these things in mind. I don't like to be treated like an inferior—like girls are treated. I like to discuss stories in practically any science fiction publication.

I'll stop with the hearty wish that AMAZING STORIES will continue at the pace it has set for itself; for despite my criticisms I acknowledge AMAZING STORIES as the best on the market, especially since the cover has been changed.

Virginia Kidd,
119 Oakdale Avenue,
Catonsville, Md.

P. S.—Have all you readers heard about the German Aero-Auto which flies as well as drives on the roads?

(We get comparatively few letters from members of your very interesting sex and it is safe to say that without exception we have always enjoyed such letters and the present one is not a bit wearisome. As regards being crazy, tell your mother that if you are crazy we really wish that more had the same affliction, because we consider your letter extremely interesting and good. We are making every effort to tell nothing in advance by the cross headings. We hardly like to give up the statement of stories to come and we have never felt that we told the story in them and I think you will find that we are right about that. We imagine all our readers have not heard about the German invention you speak of. We will always be delighted to get your letters for the Discussions.—EDITOR.)

AN INSPIRING LETTER FROM THE TREASURER OF THE INTERNATIONAL SCIENTIFIC ASSOCIATION

Editor, AMAZING STORIES:

One of the most pleasant things I can think of to do is to sit down and tell the Editor and Readers of "A. S." a few things one has noticed about our magazine in the past, and up to now.

There is one story or set of stories that is worth five times the price of every issue; "Discussions" is eternally new and interesting, as, in fact, other people's opinions usually are. As the years have passed—many new authors have come and gone, almost every conceivable type of futuristic Science has been exploited. Every story consists of 95% fiction and 5% science, with the exception of Medical, Biological, Ethnological and Short skits, such as "The White Army" and "The Exterminator." Personally, I think Dr. Breuer is the greatest of them all, in prize Scientifiction. Perhaps you would like to know a bit about this brilliant man. It was my extremely good fortune to have the honor of having Dr. Breuer show me his laboratories recently. I stopped off in Lincoln, April 25th, and called the doctor at once. As it was Sunday and 7 A.M., I was instrumental in arousing him from slumber. He was very pleasant, though, and made an appointment to meet me in his offices at 10 A.M. So, in company with Miss Alice Franklin, of the I. S. A., we were there promptly at ten. He had not arrived as yet, but his small son was there. I poked around for a minute or two and the doctor entered. Conceive a pair of widely spaced, brilliant, twinkling eyes, set beneath a Shakespearian brow, bushy, sandy hair and average height, and you have a picture of Dr. Miles J. Breuer, peer of scientifiction authors and a man whose writings and works in Pathology, especially tuberculosis, have brought him recognition internationally. Think twice before you criticize one of his stories, for, while fiction-writing is a hobby with him, he is very careful it shall remain close to earth and he had no use for "transplanting of brain" stories! His laboratories are small, but remarkably compact and efficient. He has a welcome smile and a spare moment for any of his admirers or "fans" who may stop in Lincoln. I hope this little sketch has made him better acquainted.

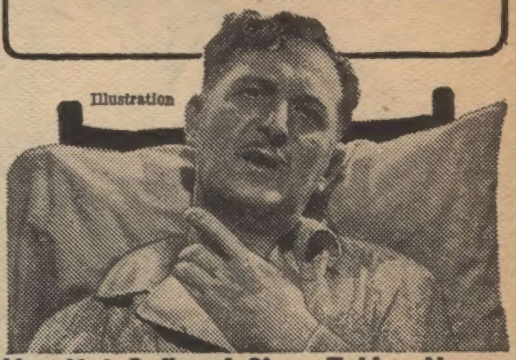
It is customary to say, "I do and I don't like" in a letter, so here goes:

As every story is an effort of hard work and an effort to please, I find few brickbats to mention, although, I will say that "The Secret Kingdom" was not very interesting, either fictionally or otherwise. John W. Campbell's "Wade, Arcot, Morey, Fully & Company," utilizes quite a bit of conceivable science in his yarns. He excels Dr. Smith, although they both go far in futuristic Science. "The Moon Pool" has yet to be equalled. Merritt and his three contemporaries, Williamson, Taine and Miller are hard to beat. They are the "Aesthetic" authors. On the practical side, Breuer, Campbell, Vincent and Meek are hard to equal. Watch for Williamson's "Lake of Light" which he is just finishing. People should be careful when using the term impossible, because anything conceivable in the human brain and not violating a cosmic "law," is possible—*ie.* Einstein is very mediocre! "Best of Luck" to all A. S. readers, be they from Asia, Europe or Africa—a "hello" to North American A. S. followers, a "cheerio!" to I. S. A. members and a "Carry on!" to Dr. Sloane and staff! See you again next year!

Walter L. Dennis,
Treas. International Science Association,
4653 Addison Street,
Chicago, Ill.

(We are very proud to say, and we think we can do it with absolute correctness, that the International Scientific Association had its origin in the columns of this magazine. The Editor remembers years ago, the suggestion coming from a correspondent that they were getting up or that it would be well to get up a correspondence club. The staff of this magazine has so much on their hands in the way of bringing it out that the formation of the club, as we stated, had to be in the hands of the readers and the readers have certainly done well by it and now they have their club, which includes in its membership many very high grade scientists. We have little to say about your letter simply because it is so good and complete. Your criticism towards the end is interesting and your good wishes are more than welcome. A little encouragement and friendly appreciation count for a great deal in our line of work.—EDITOR.)

ASTHMA BAD
THOUGHT HE COULD NOT LIVE



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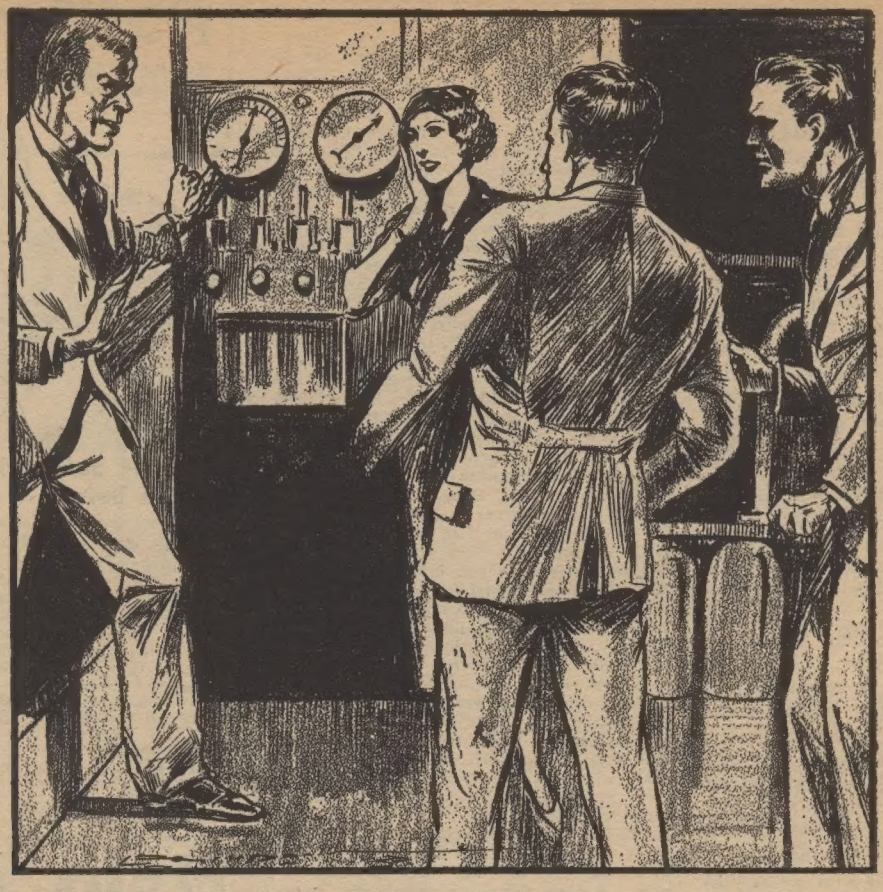

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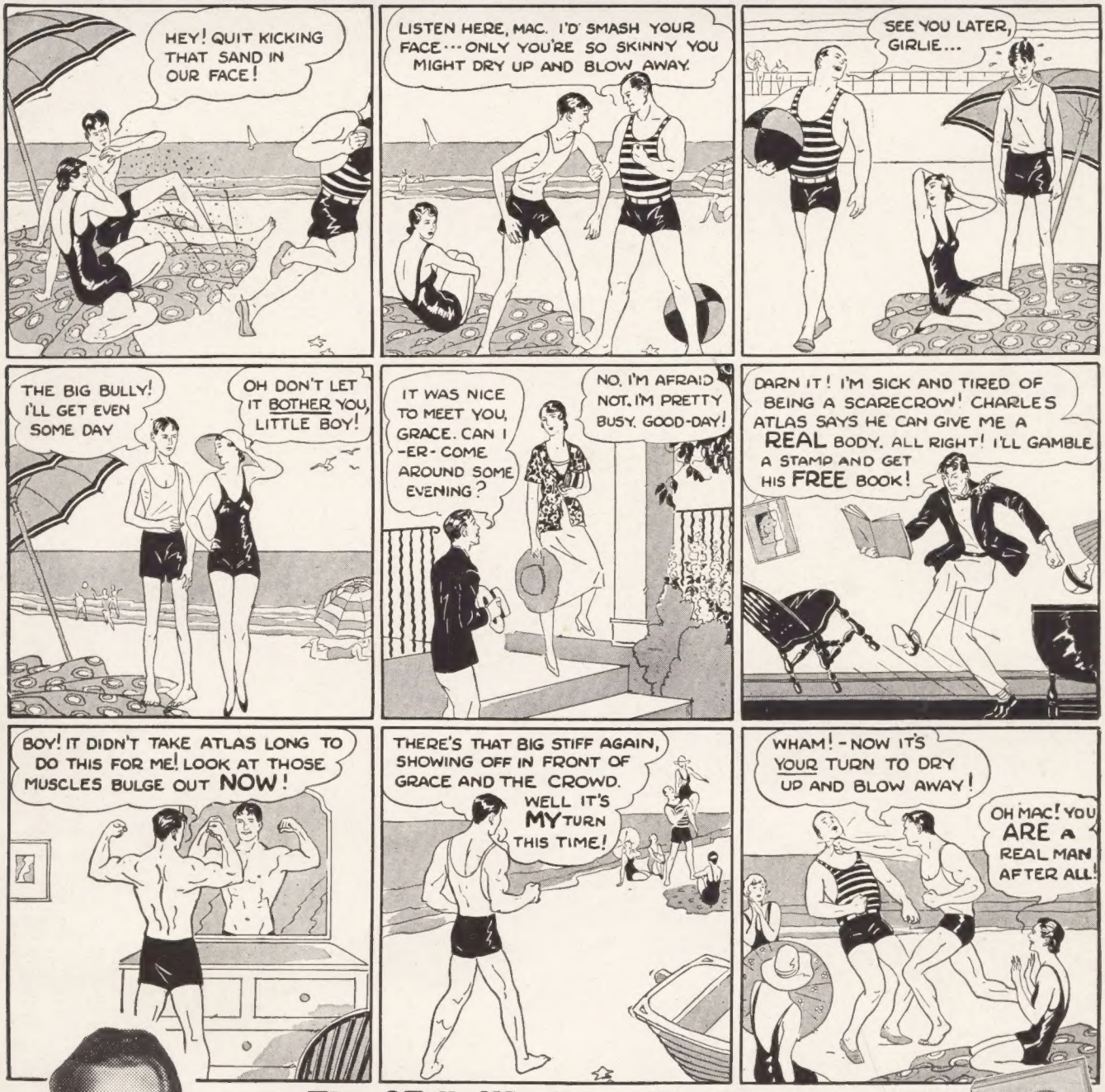
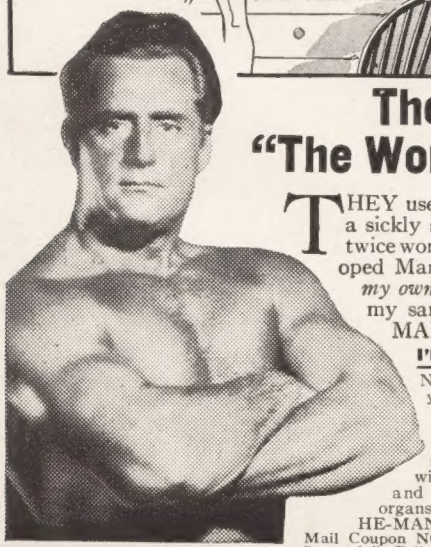
THE INSULT THAT MADE A MAN OUT OF "MAC"


HEY! QUIT KICKING THAT SAND IN OUR FACE!
LISTEN HERE, MAC. I'D SMASH YOUR FACE··· ONLY YOU'RE SO SKINNY YOU MIGHT DRY UP AND BLOW AWAY.
SEE YOU LATER, GIRLIE...
THE BIG BULLY! I'LL GET EVEN SOME DAY
OH DON'T LET IT BOTHER YOU, LITTLE BOY!
IT WAS NICE TO MEET YOU, GRACE. CAN I -ER- COME AROUND SOME EVENING?
NO, I'M AFRAID NOT. I'M PRETTY BUSY. GOOD-DAY!
DARN IT! I'M SICK AND TIRED OF BEING A SCARECROW! CHARLES ATLAS SAYS HE CAN GIVE ME A REAL BODY. ALL RIGHT! I'LL GAMBLE A STAMP AND GET HIS FREE BOOK!
BOY! IT DIDN'T TAKE ATLAS LONG TO DO THIS FOR ME! LOOK AT THOSE MUSCLES BULGE OUT NOW!
THERE'S THAT BIG STIFF AGAIN, SHOWING OFF IN FRONT OF GRACE AND THE CROWD. WELL IT'S MY TURN THIS TIME!
WHAM! - NOW IT'S YOUR TURN TO DRY UP AND BLOW AWAY!
OH MAC! YOU ARE A REAL MAN AFTER ALL!



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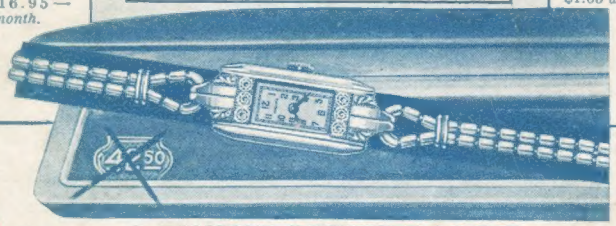

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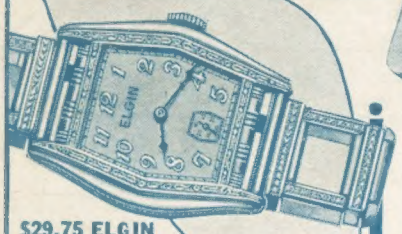

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